

KAUOHENG



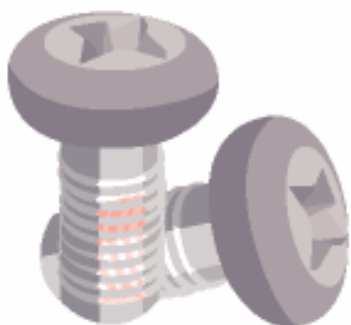
KH-313 SERIES PARTS LIST & SERVICE MANUAL

電腦橫編織機

KH

COMPUTERIZED FLAT KNITTING MACHINE

KAUOHENG

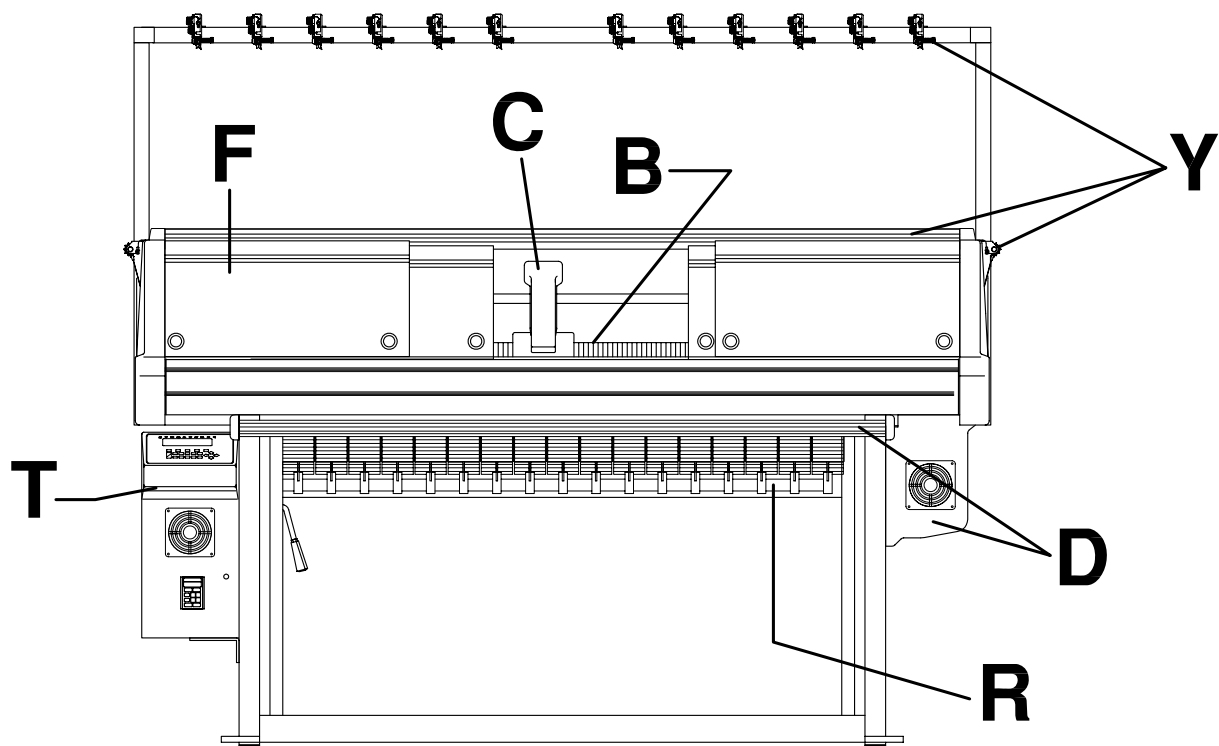


KH-313 零件表 PARTS LIST

電腦橫編織機

KH

COMPUTERIZED FLAT KNITTING MACHINE



紗線引導裝置 /Yarn Guide Equipment:

Y

針床與搖床 /Bed & Racking Unit:

B

機頭部分 /Carriage:

C

傳動裝置 /Driving Equipment:

D

捲布裝置 /Take-down Equipment:

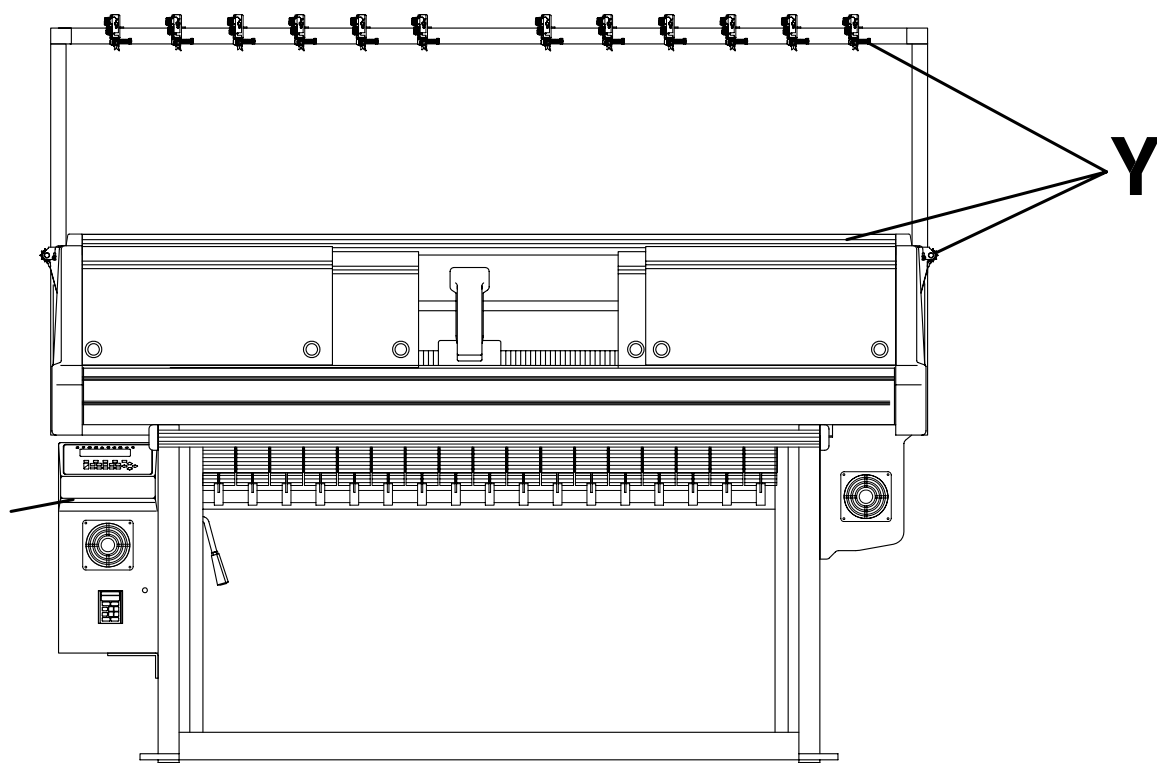
R

主體與護蓋 /Frame & Cover:

F

控制單元 /Controller:

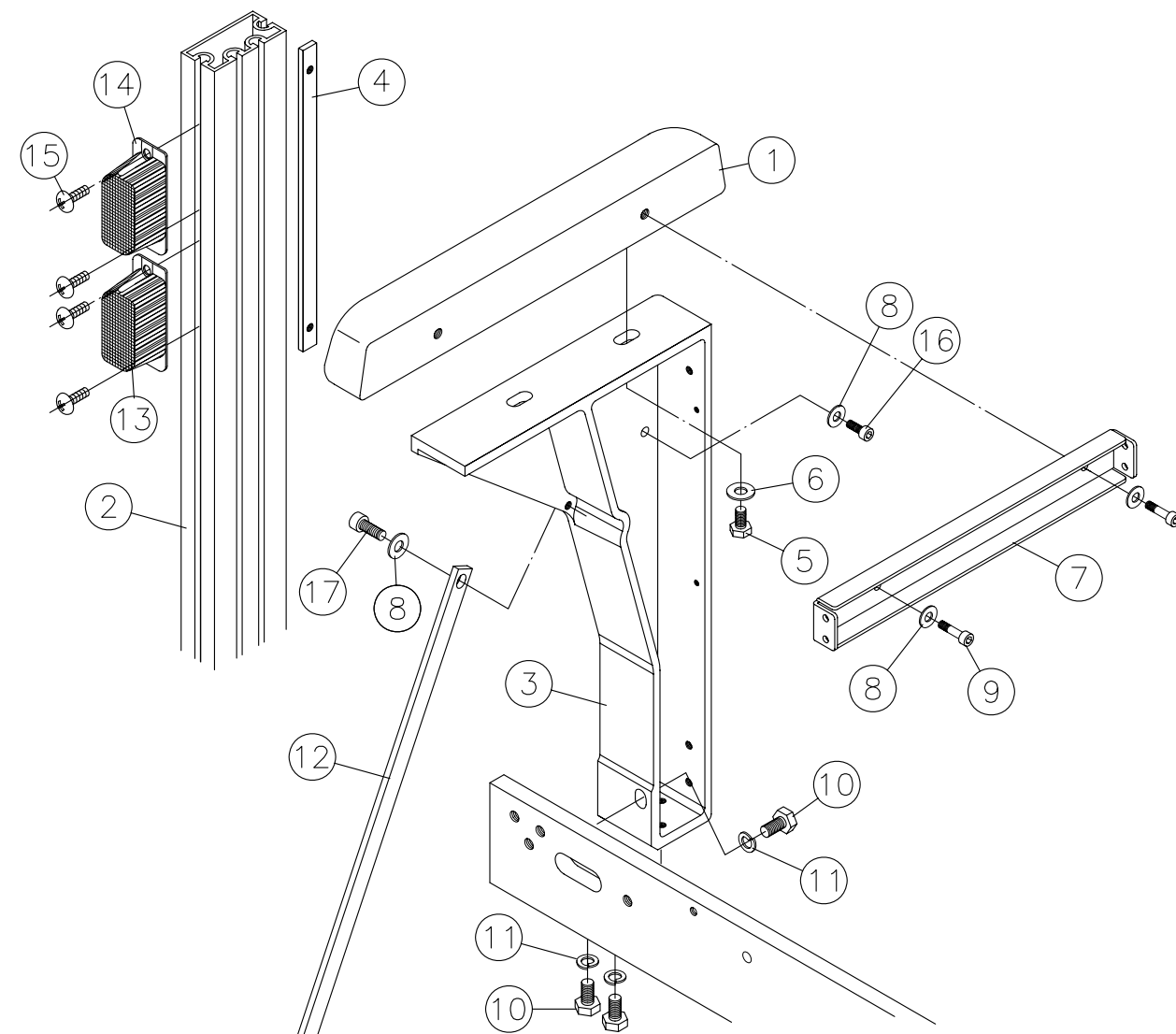
T



紗線引導裝置 /Yarn Guide Equipment:

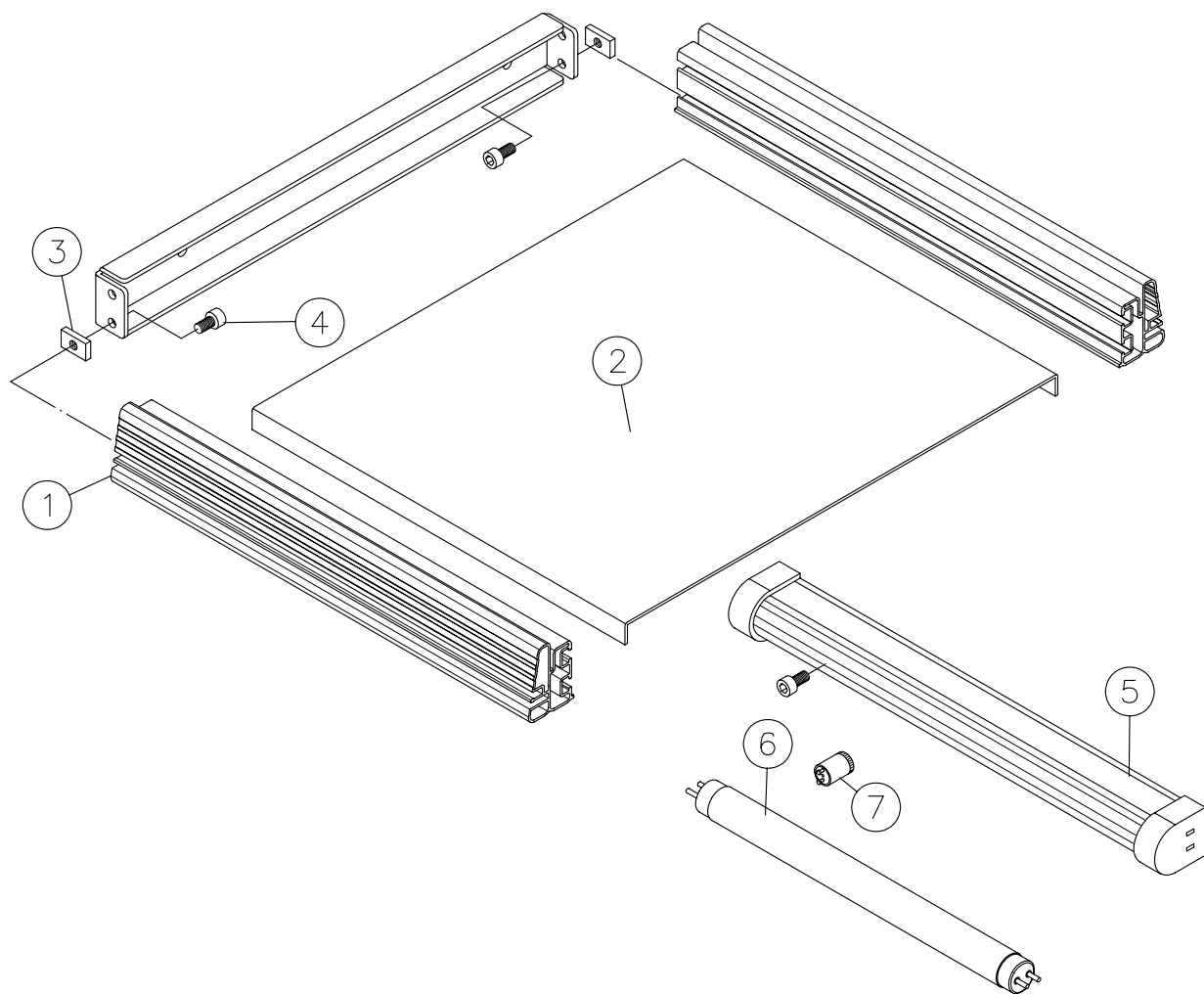
Y1-Y7

313Series



No.	編號 PARTS No.	品名 PARTS NAME	數量 QTY	備註 REMARKS
1	KCK9017	SIDE COVER <L,R>	2	
2	KCF9008N	CONE STAND PLATE POLE	2	
3	KCK9019	BRACKET <L,R>	2	
4	KCK9019B	UNT	1	
5	KSS0830	SCREW <M8x30>	4	
6	KSW0008	WASHER	4	
7	KCK9015	CONE STAND MOUNTING PLATE	2	
8	KSW0006	WASHER	4	
9	KSC0625	SCREW <M6x25>	4	
10	KSS0825	SCREW <M8x25>	8	
11	KSWS008	SPRING WASHER	8	
12	KCK9019A	FITTING PLATE	2	
13	KCF9001Y	SIGNAL LAMP	1	YELLOW
14	KCF9001G	SIGNAL LAMP	1	GREEN
15	KSS0510	SCREW <M5x10>	4	
16	KSC0616	SCREW <M6x16>	4	
17	KSC0612	SCREW <M6x12>	2	

Y



-Y2-

This technical drawing is an exploded view of a mechanical assembly, likely a window blind or a similar lifting mechanism. It consists of 13 numbered components:

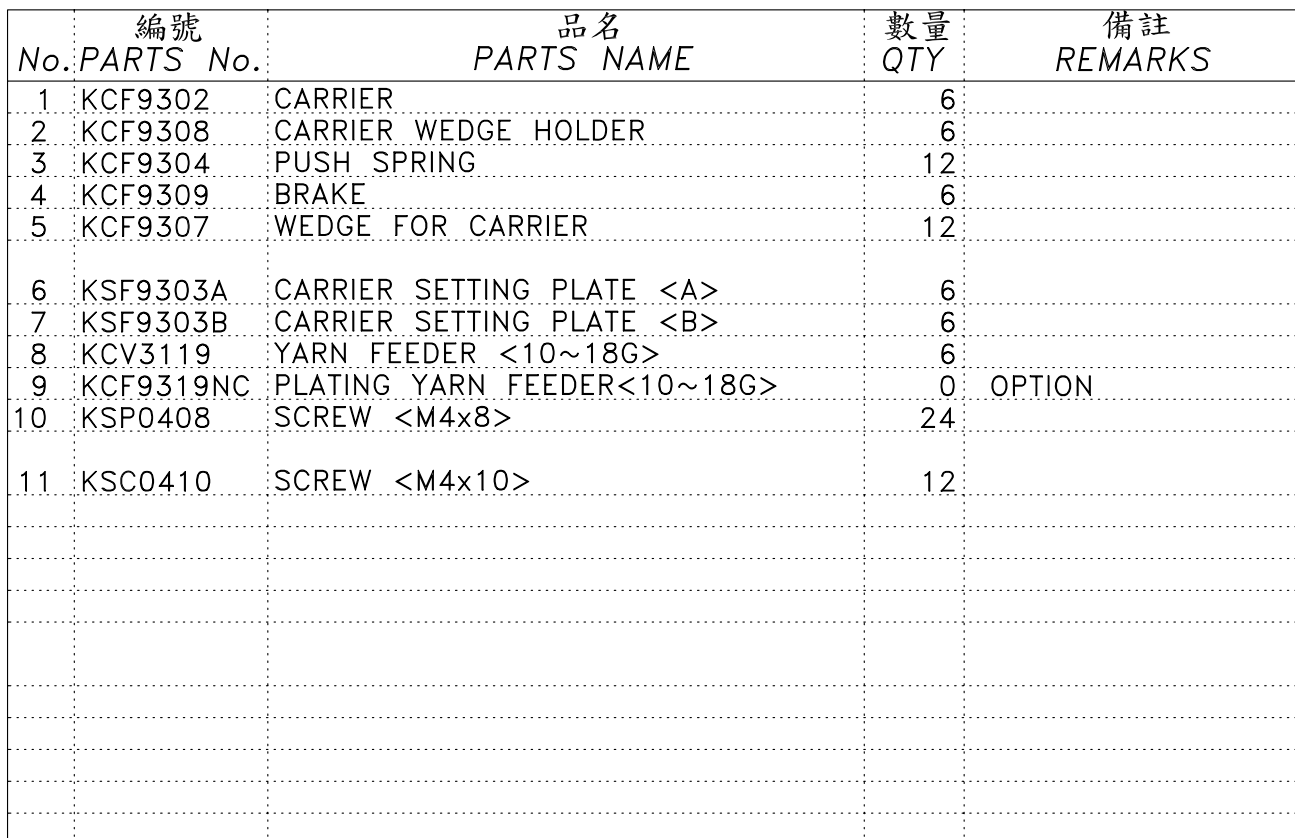
- 1**: A small rectangular plate or bracket.
- 2**: A long, thin rectangular plate or bracket.
- 3**: A small rectangular plate or bracket.
- 4**: A long, thin rectangular plate or bracket.
- 5**: A small rectangular plate or bracket.
- 6**: A small rectangular plate or bracket.
- 7**: A small rectangular plate or bracket.
- 8**: A small rectangular plate or bracket.
- 9**: A small rectangular plate or bracket.
- 10**: A small rectangular plate or bracket.
- 11**: A small rectangular plate or bracket.
- 12**: A small rectangular plate or bracket.
- 13**: A small rectangular plate or bracket.

The diagram shows the relative positions and assembly sequence of these components. Key features include:

- A central horizontal shaft or rod passing through several components.
- A series of vertical rods or cables on the right side, connected to the main assembly.
- Various screws, bolts, and fasteners used to secure the components.
- A curved arm or lever on the left side, possibly for manual operation.

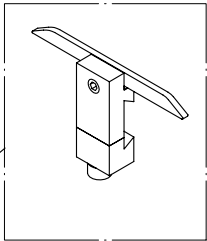
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Y



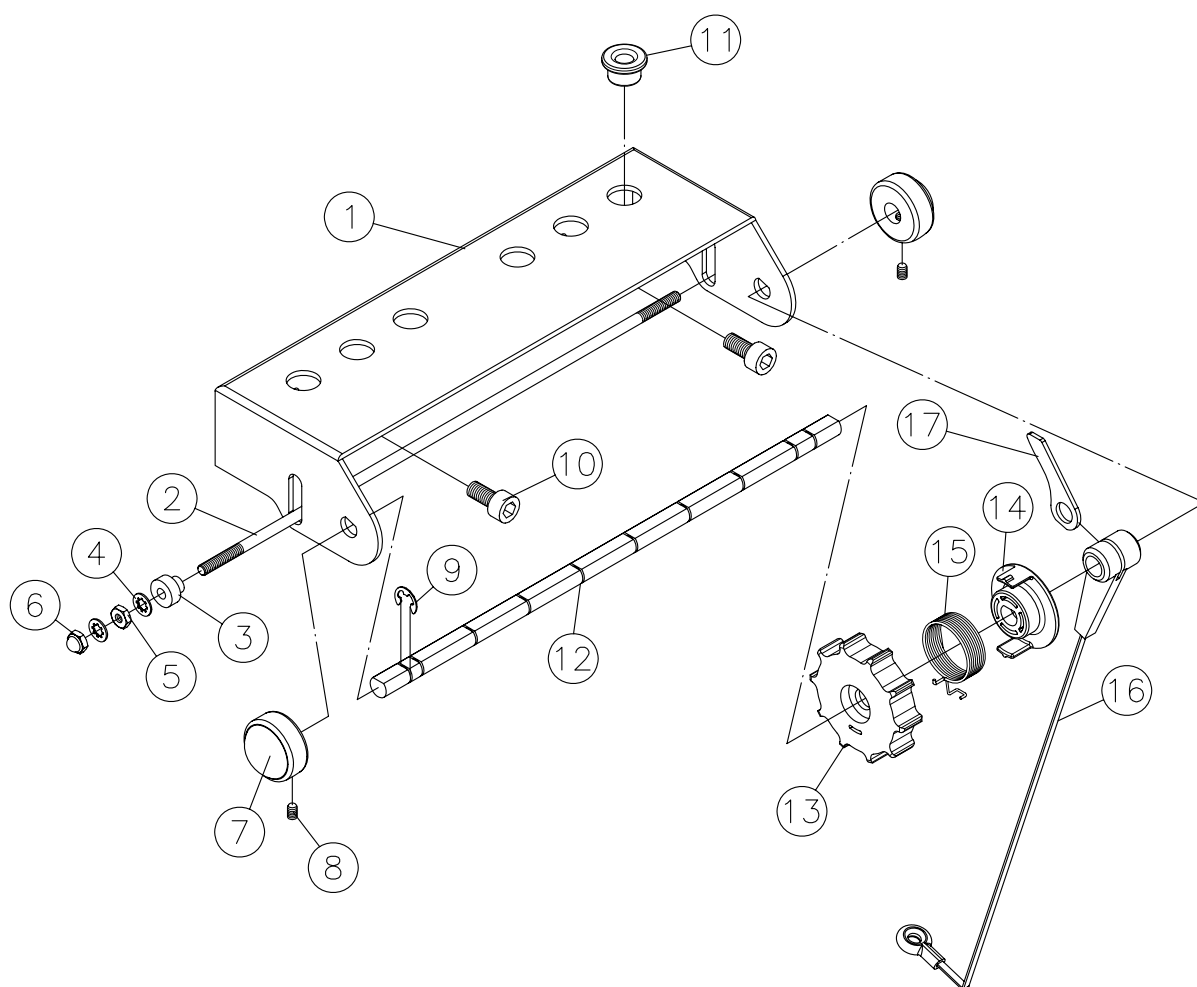
313Series

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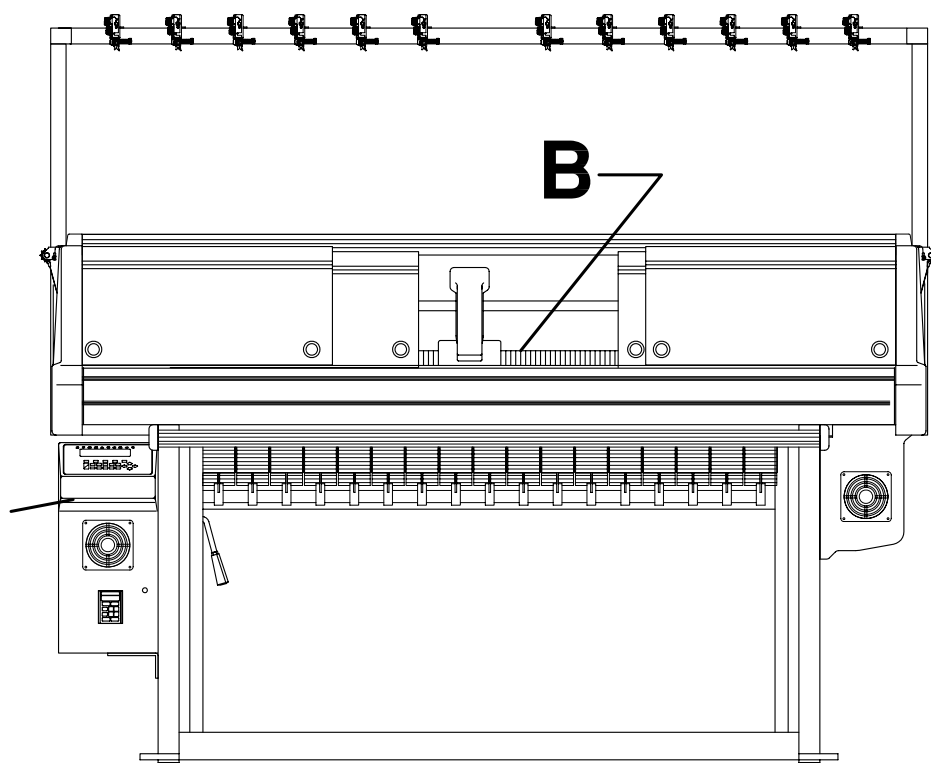


-Y6-

313Series



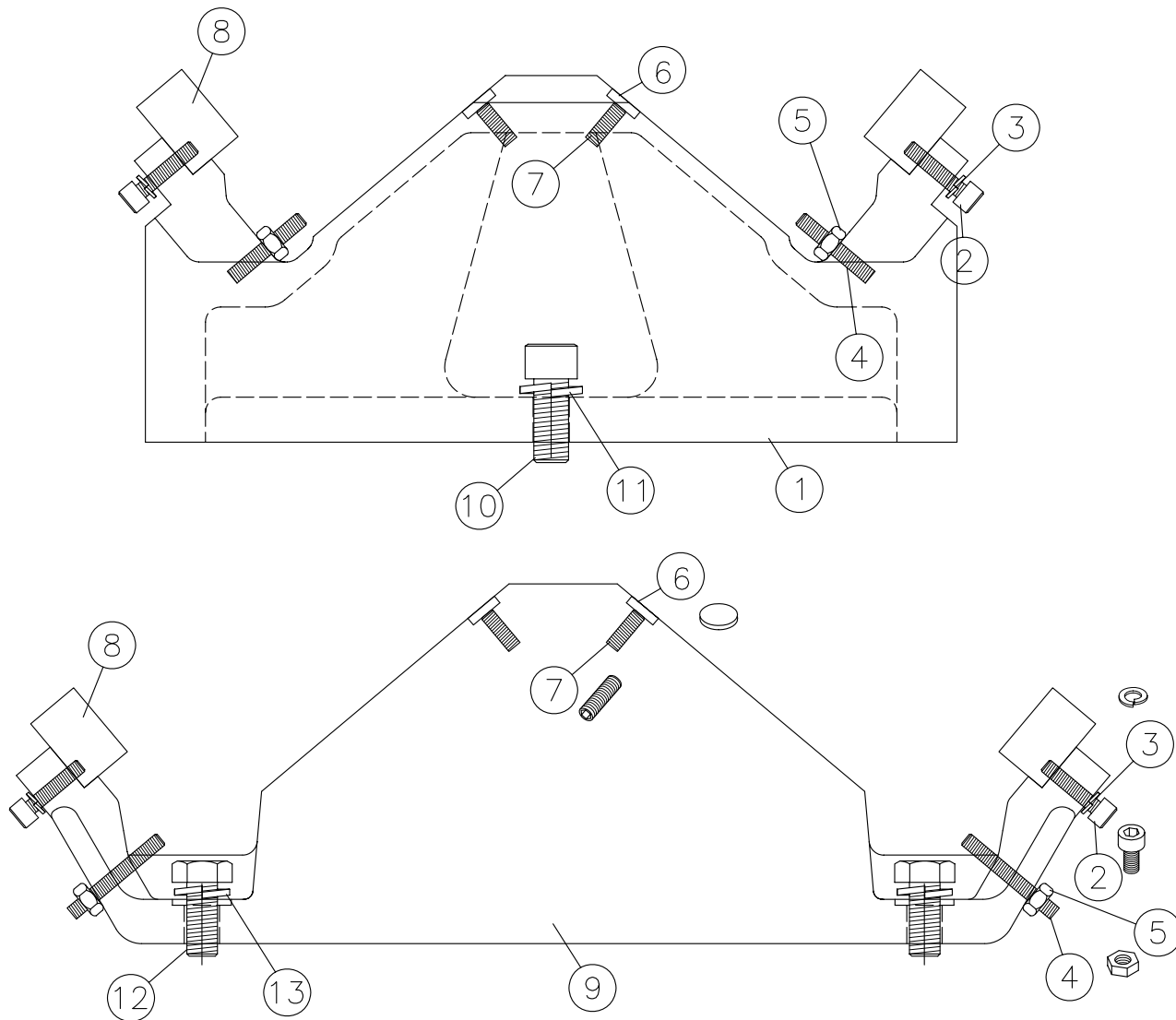
No.	編號 PARTS No.	品名 PARTS NAME	數量 QTY	備註 REMARKS
1	KCW6021	SIDE TENSION BOX	2	
2	KCW6022	TROLLEY WIRE	2	
3	KCW6031	STAY HOLDER	4	
4	KSWT003	WASHER	8	
5	KSN0003	NUT	4	
6	KSN0003	NUT	4	
7	KCW6023	SIDE CAP	4	
8	KSE0406	SCREW <M4x6>	4	
9	KPE0006	E-RING	20	
10	KSC0410	SCREW <M4x10>	4	
11	KCW6024	EYELET	12	
12	KCW6025	SIDE TENSION SHAFT	2	
13	KCW6026	DIAL	12	
14	KCW6027	DIAL LOCKING PLATE	12	
15	KCW6028	KICK SPRING	12	
16	KCW6029	SIDE TENSION ASSY <10~18G>	12	
17	KCW6030	DETECTING PLATE	12	



針床與搖床 /Bed & Racking Unit:

B1-B10

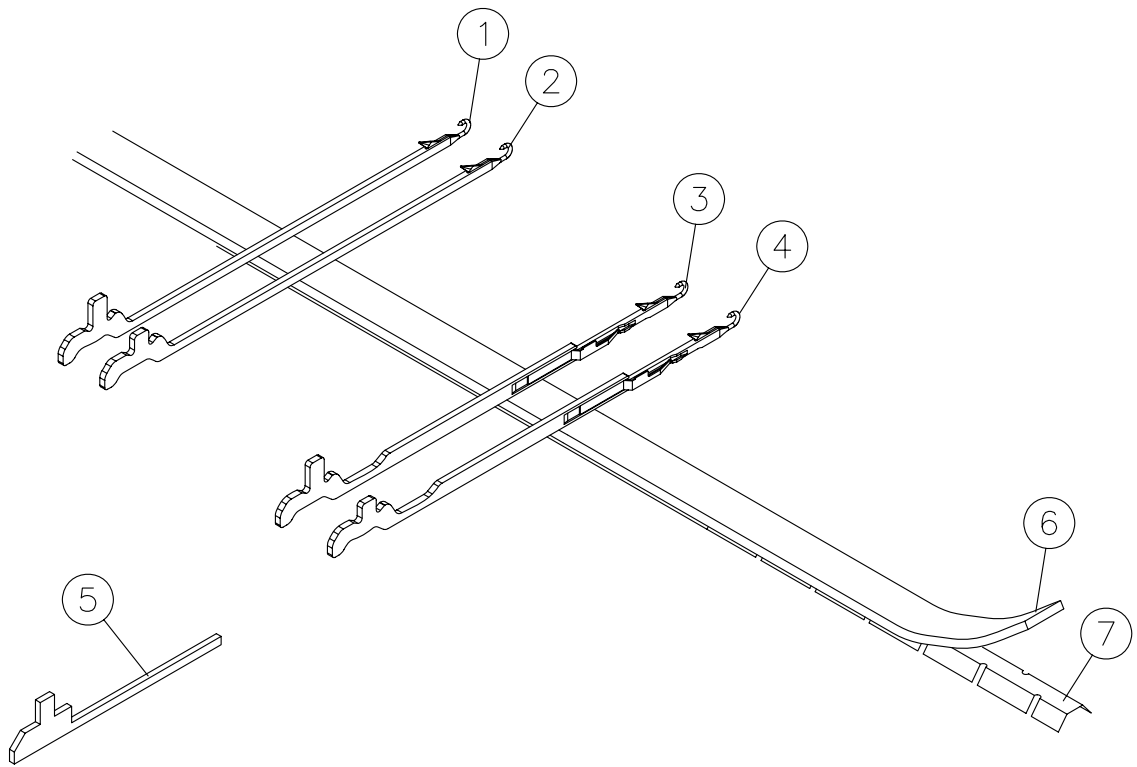
313Series



B

[illegible]

313Series



B

[illegible]

[illegible]

[illegible]

This exploded view diagram illustrates the assembly of a cable management system. The components are numbered 1 through 13:

- 1**: A cable management device with a series of parallel channels.
- 2**: A cable management device with a series of parallel channels, similar to component 1.
- 3**: A long, thin metal plate with a hole at one end.
- 4**: A long, thin metal plate with a hole at one end, similar to component 3.
- 5**: A long, thin metal plate with a hole at one end, similar to component 3.
- 6**: A long, thin metal plate with a hole at one end, similar to component 3.
- 7**: A small metal pin or screw.
- 8**: A small metal pin or screw, similar to component 7.
- 9**: A long, thin metal plate with a hole at one end, similar to component 3.
- 10**: A small metal pin or screw, similar to component 7.
- 11**: A long, thin metal plate with a hole at one end, similar to component 3.
- 12**: A small metal pin or screw, similar to component 7.
- 13**: A small metal pin or screw, similar to component 7.

The diagram shows how these components are assembled into a cable management system. Components 1 and 2 are the main cable management devices. Components 3, 4, 5, 6, 9, and 11 are long, thin metal plates that serve as supports or guides. Components 7, 8, 10, 12, and 13 are small metal pins or screws used to secure the plates to the cable management devices. Component 13 is shown securing plate 11 to device 1. Component 8 is shown securing plate 9 to device 2. Component 12 is shown securing plate 6 to device 2. Component 10 is shown securing plate 3 to device 2. Component 7 is shown securing plate 4 to device 2. Component 5 is shown as a separate plate, likely for another device.

[illegible]

[illegible]

This technical diagram illustrates the assembly of a cable management system. The components are numbered 1 through 15:

- 1**: A long, thin metal plate with a series of parallel slots along its length.
- 2**: A long, thin metal plate with a series of parallel slots along its length.
- 3**: A long, thin metal plate with a series of parallel slots along its length.
- 4**: A small metal plate with two circular holes.
- 5**: A small metal plate with two circular holes.
- 6**: A small metal plate with two circular holes.
- 7**: A small metal plate with two circular holes.
- 8**: A small metal plate with two circular holes.
- 9**: A small metal plate with two circular holes.
- 10**: A small metal plate with two circular holes.
- 11**: A small metal plate with two circular holes.
- 12**: A small metal plate with two circular holes.
- 13**: A small metal plate with two circular holes.
- 14**: A small metal plate with two circular holes.
- 15**: A small metal plate with two circular holes.

The diagram shows how these components are assembled to form a cable management system. The plates (1, 2, 3) are the main structural elements. The small plates (4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15) are used to secure the cables and provide additional support. The exploded view shows the relative positions of the components and the screws used to assemble them.

[illegible]

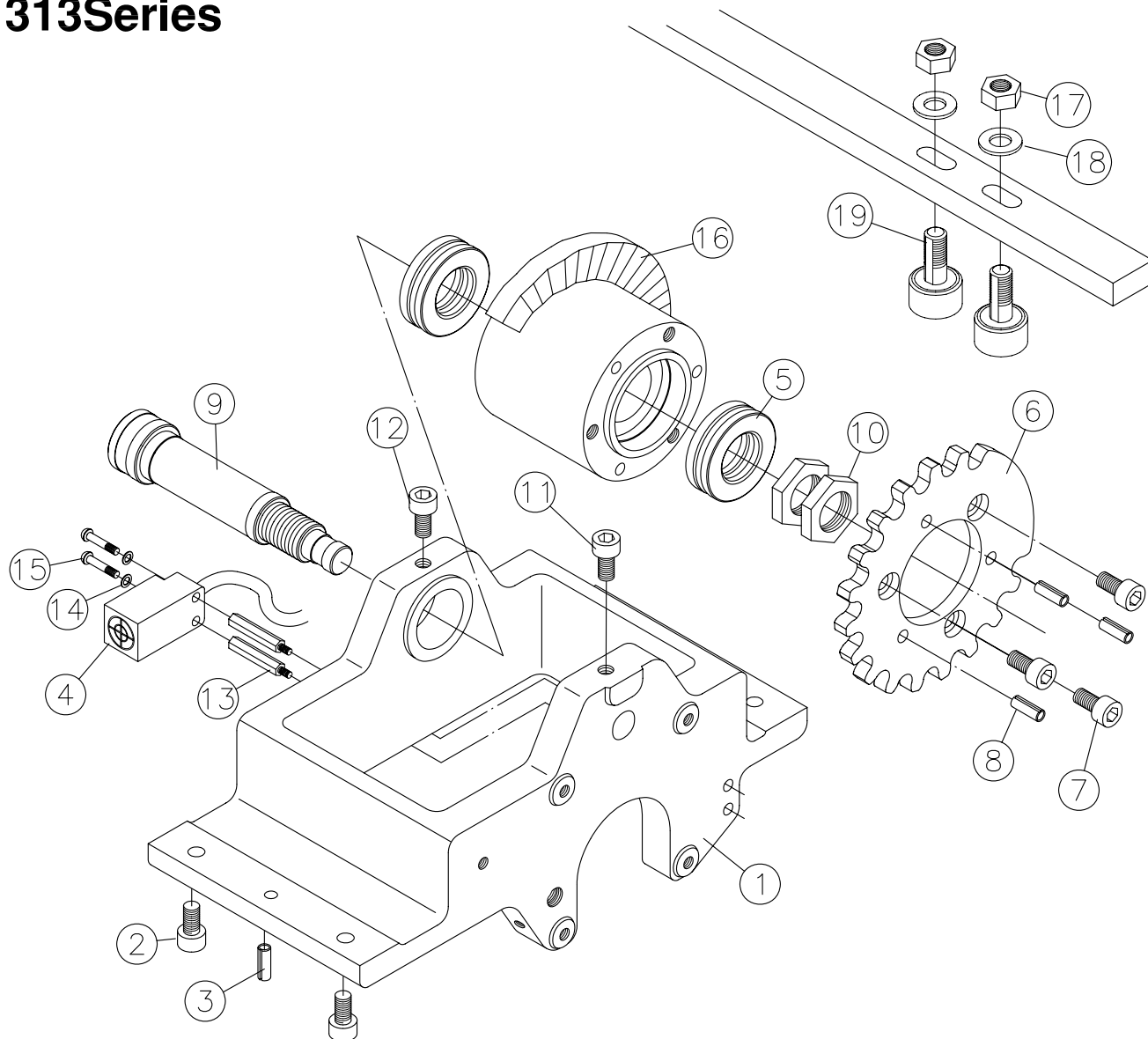
This technical diagram illustrates the exploded view of a window blind assembly, showing the relationship between various components. The parts are numbered as follows:

- 1**: A long, thin slat with a series of small, evenly spaced notches along its top edge.
- 2**: A long, thin slat with a series of small, evenly spaced notches along its bottom edge.
- 3**: A long, thin slat with a series of small, evenly spaced notches along its top edge, shown in a separate exploded view.
- 4**: A small, curved bracket or clip used to connect the slats.
- 5**: A small, curved bracket or clip used to connect the slats.
- 6**: A small, curved bracket or clip used to connect the slats.
- 7**: A small, curved bracket or clip used to connect the slats.
- 8**: A small, curved bracket or clip used to connect the slats.
- 9**: A small, curved bracket or clip used to connect the slats.
- 10**: A small, curved bracket or clip used to connect the slats.
- 11**: A small, curved bracket or clip used to connect the slats.
- 12**: A small, curved bracket or clip used to connect the slats.
- 13**: A small, curved bracket or clip used to connect the slats.
- 14**: A small, curved bracket or clip used to connect the slats.
- 15**: A small, curved bracket or clip used to connect the slats.

B

[illegible]

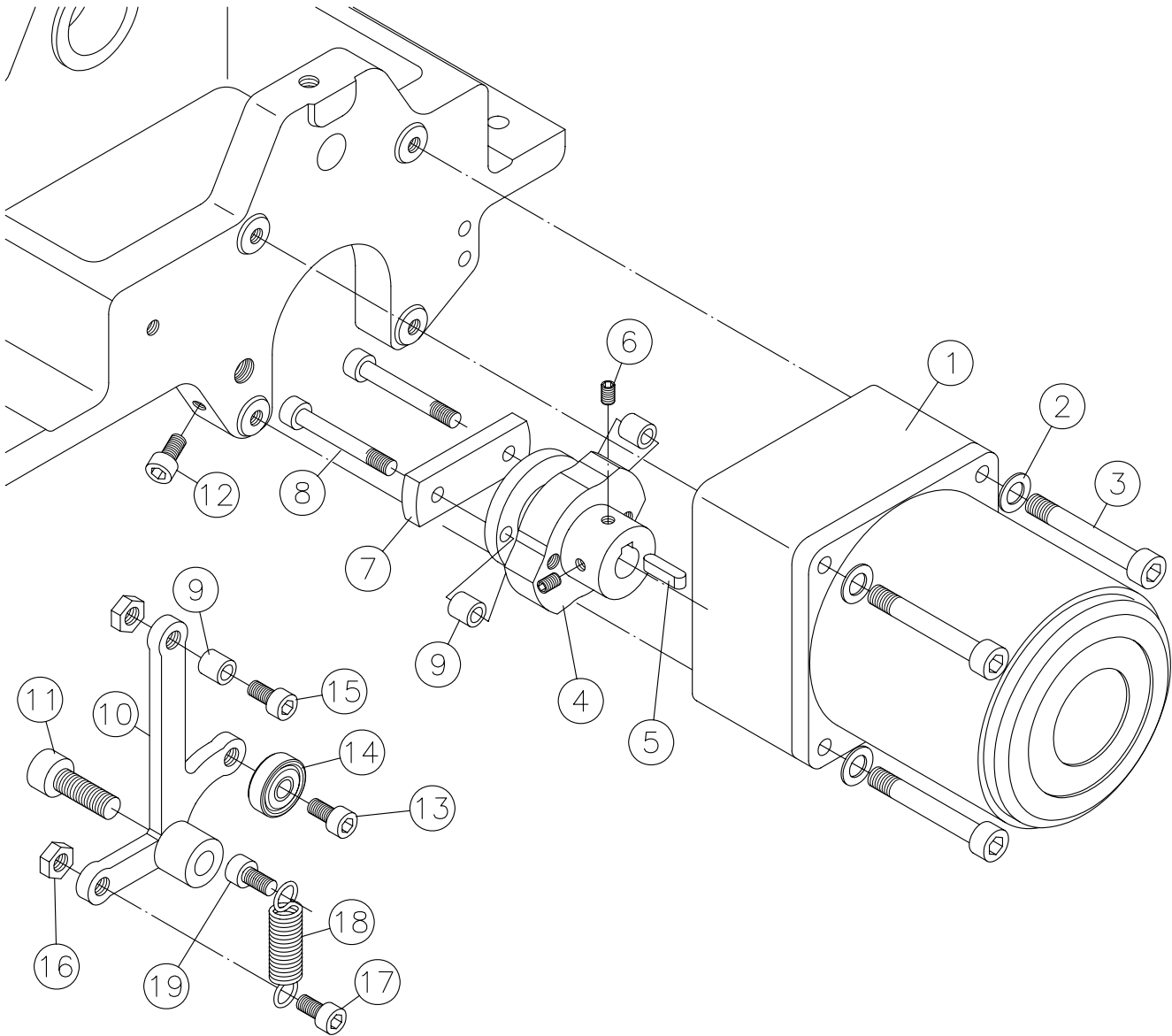
313Series



B

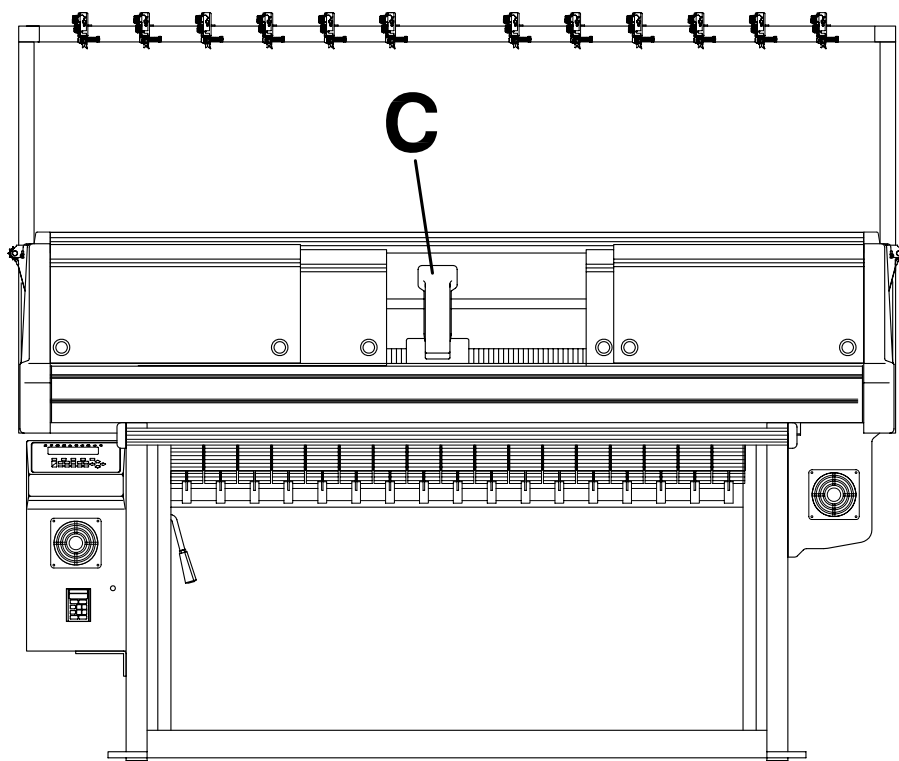
No.	編號 PARTS No.	品名 PARTS NAME	數量 QTY	備註 REMARKS
1	KCF9394	SHAFT BRACKET	1	
2	KSC0625	SCREW <M6x25>	4	
3	KPC0520	PIN	2	
4	KCF9407	SENSOR	1	
5	KTB2904	THRUST BEARING	2	
6	KCF9399	RACKING GEAR	1	
7	KSC0516	SCREW <M5x16>	3	
8	KPC0612	PIN	3	
9	KCF9392	RACKING SHAFT	1	
10	KCF9393	NUT	2	
11	KSC0620	SCREW <M6x20>	1	
12	KSC0616	SCREW <M6x16>	1	
13	KCF9425	SPACER	2	
14	KSW0003	WASHER	2	
15	KSC0316	SCREW <M3x16>	2	
16	KCF9405	RACKING CAM <5~18G>	1	
17	KSN0008	NUT	2	
18	KSW0008	WASHER	2	
19	KCF9361	BEARING	2	

313Series



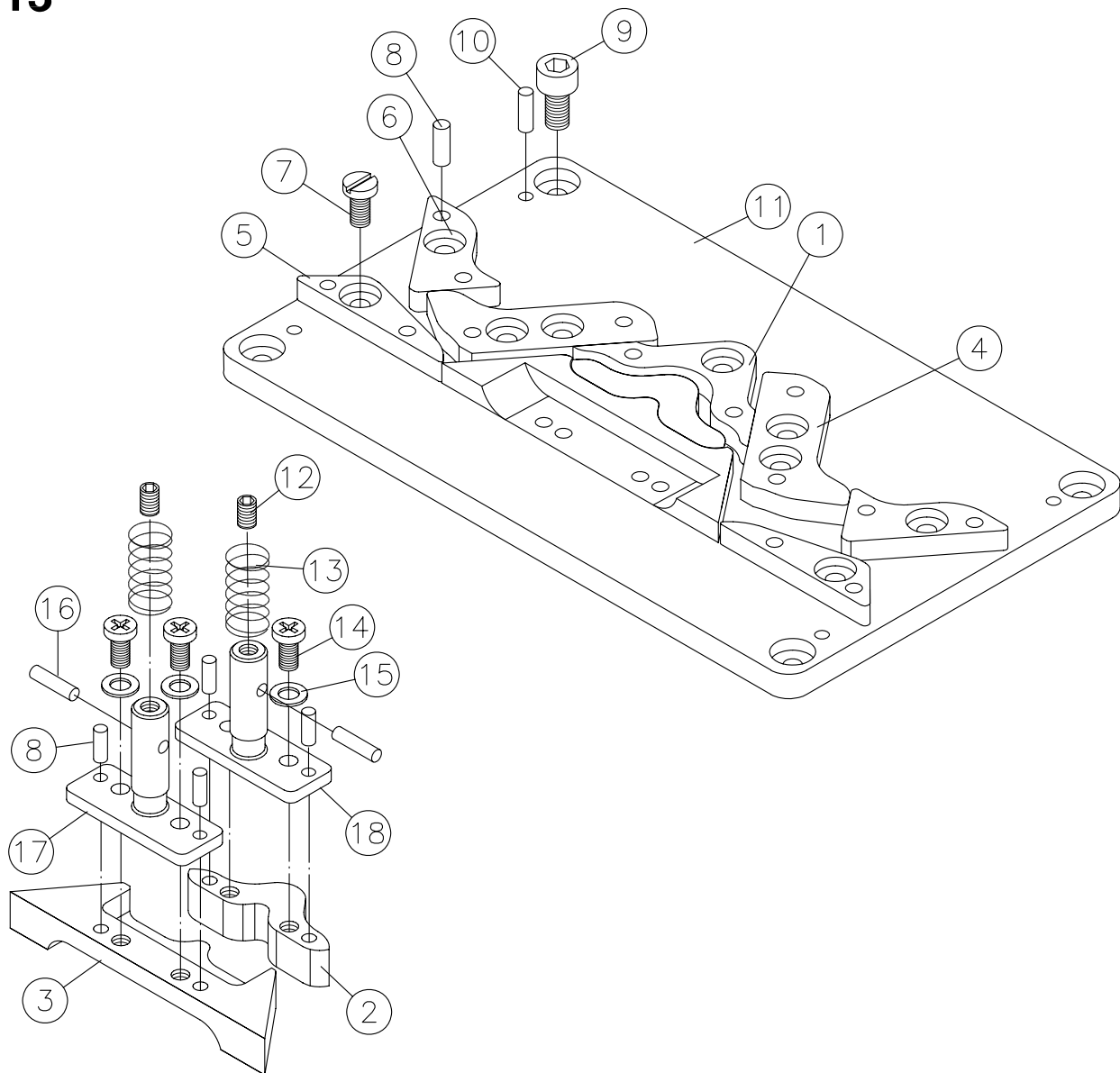
B

編號 No.	PARTS No.	品名 PARTS NAME	數量 QTY	備註 REMARKS
1	KCF9397	RACKING MOTOR	1	
2	KSW0005	WASHER	4	
3	KSC0540	SCREW <M5x40>	4	
4	KCF9401	CAM	1	
5	KEY0004	KEY	1	
6	KSE0410	SETSCREW <M4x10>	2	
7	KCF9401B	SENSOR BRACKET	1	
8	KSC0530	SCREW <M5x30>	2	
9	KCF9403	COLLAR	3	
10	KCF9414	FITTING GEAR LEVER	1	
11	KSC0830	SCREW <M8x30>	1	
12	KSC0616	SCREW <M6x16>	1	
13	KSC0610	SCREW <M6x10>	1	
14	KCB0626	BALL BEARING	1	
15	KSC0516	SCREW <M5x16>	1	
16	KSN0005	NUT	2	
17	KSC0516	SCREW <M5x16>	1	
18	KCF9422	PULL SPRING	1	
19	KSC0530	SCREW <M5x30>	1	



機頭部份 /Carriage:

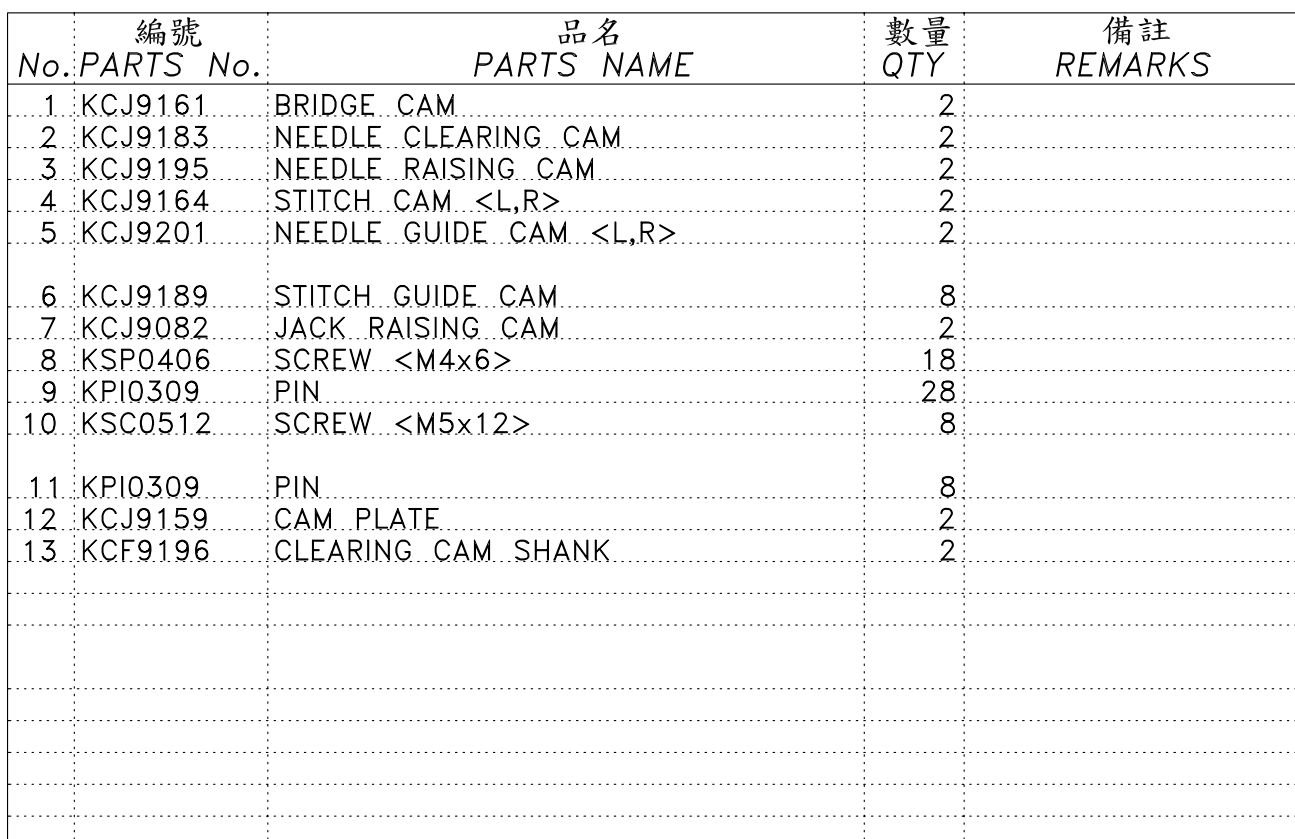
C1-C15

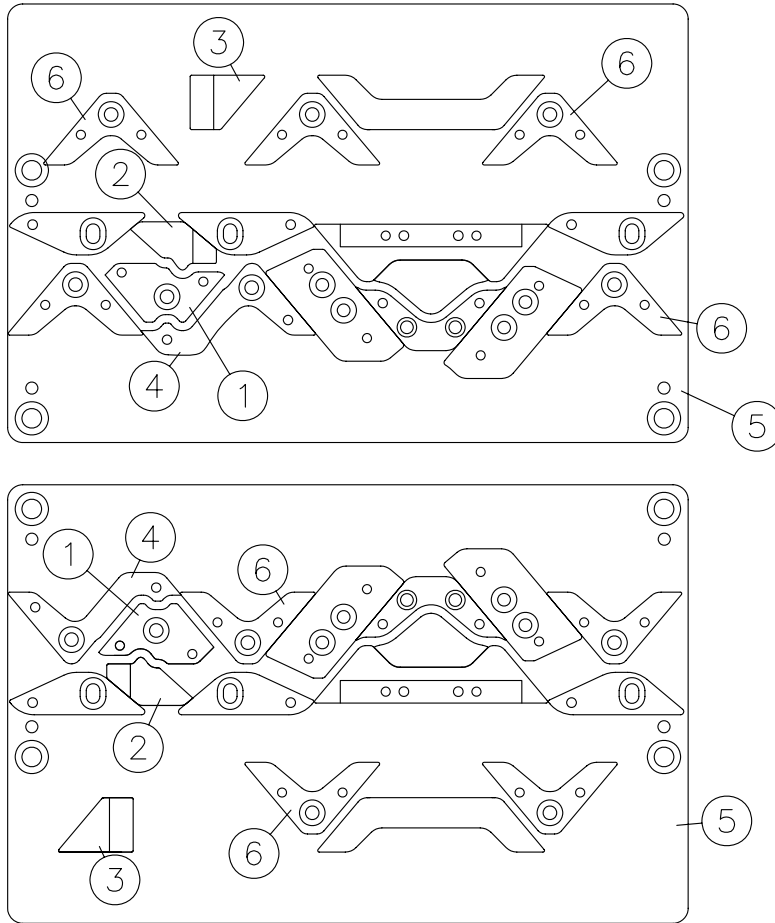


編號 No.	PARTS No.	品名 PARTS NAME	數量 QTY	備註 REMARKS
1	KCF9161	BRIDGE CAM	2	
2	KCF9183	NEEDLE CLEARING CAM	2	
3	KCF9195	NEEDLE RAISING CAM	2	
4	KCF9164	STITCH CAM <L,R>	2	
5	KCF9201	NEEDLE GUIDE CAM <L,R>	2	
6	KCF9192	STITCH GUIDE CAM <L,R>	1	
7	KSP0406	SCREW <M4x6>	18	
8	KPI0309	PIN	28	
9	KSC0512	SCREW <M5x12>	8	
10	KPI0309	PIN	8	
11	KCF9159	CAM PLATE	2	
12	KSE0404	SETSCREW <M4x4>	4	
13	KCF9188	PUSH SPRING	4	
14	KSP0406	SCREW <M4x6>	8	
15	KSW0004	WASHER	8	
16	KPI0314	PIN	4	
17	KCF9184	RAISING CAM SHANK	2	
18	KCF9196	CLEARING CAM SHANK	2	

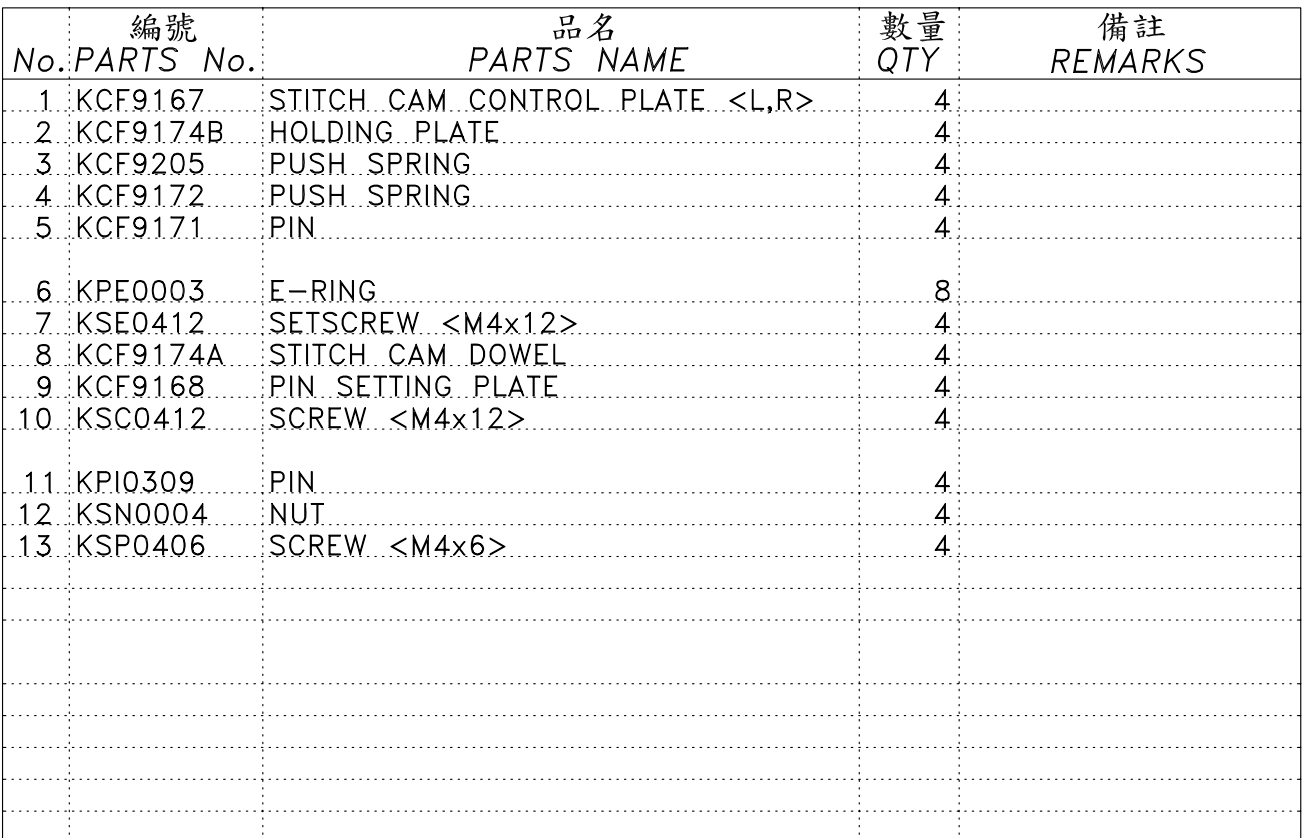
C

C

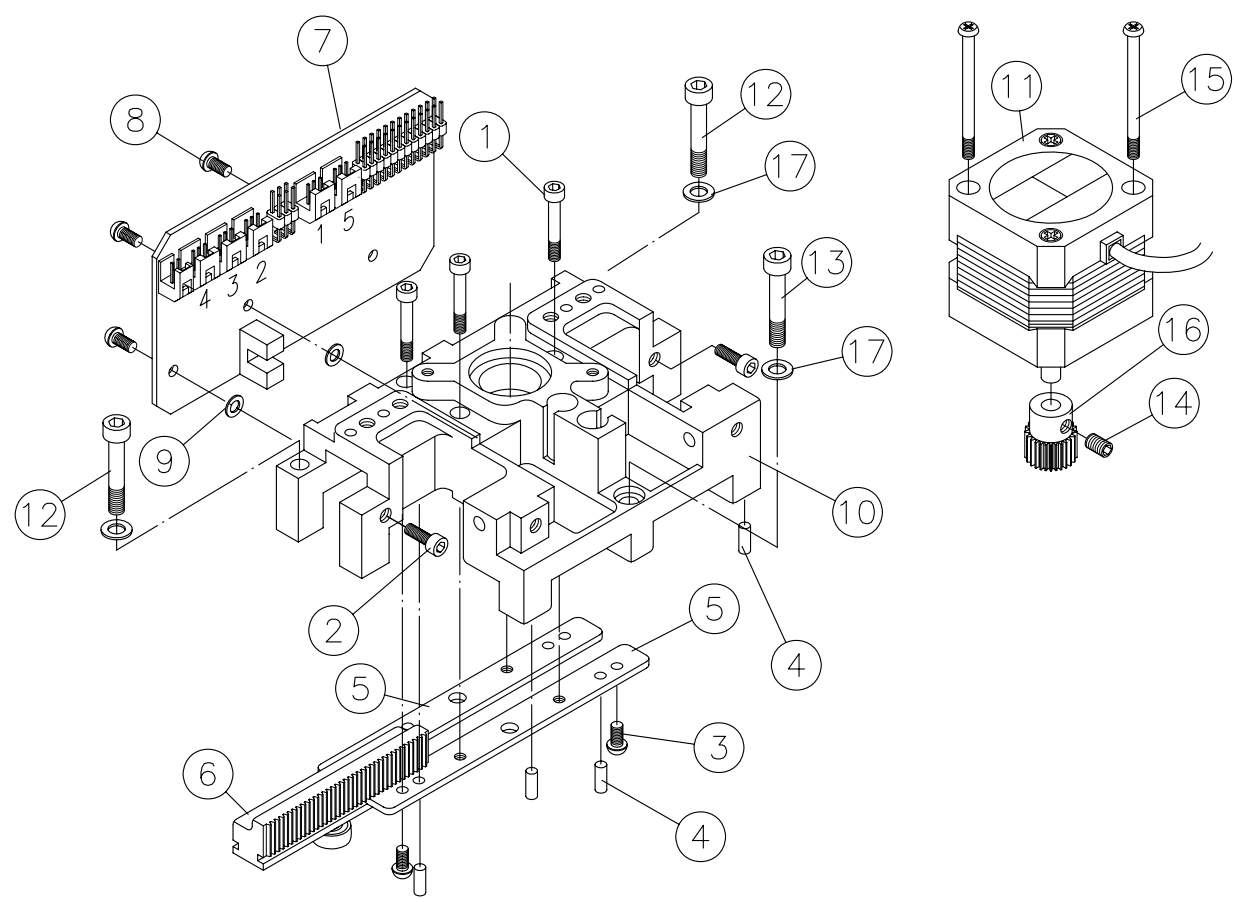


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C



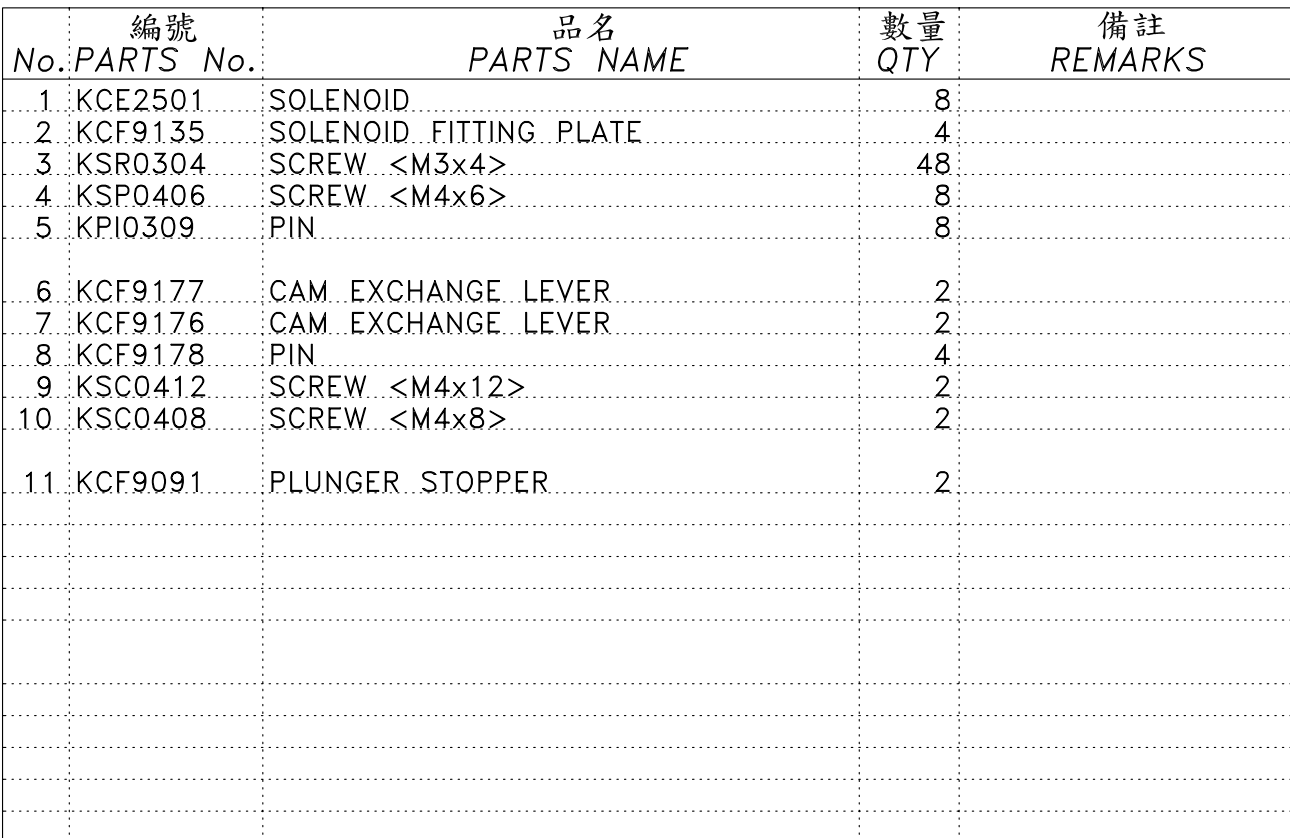
313Series



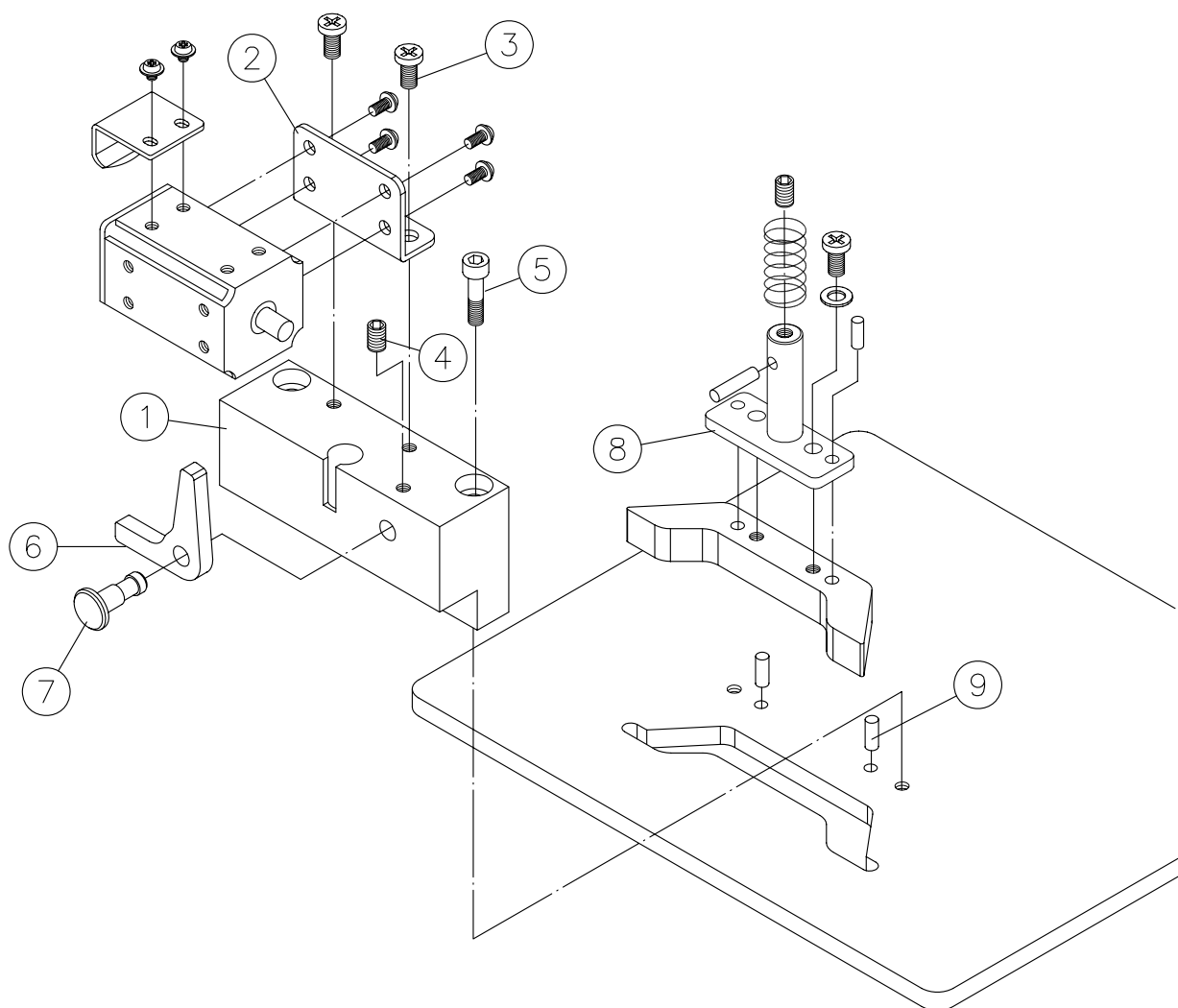
編號 No.	品名 PARTS NAME	數量 QTY	備註 REMARKS
1	KSC0310 SCREW <M3×10>	8	
2	KPC0318 PIN	4	
3	KSR0305 SCREW <M3×5>	8	
4	KPI0308 PIN	16	
5	KCF9147 HOLDING PLATE	4	
6	KCF9145 STITCH CONTROL TEETH PLATE	2	
7	KCE0002 PC BOARD	2	
8	KSR0308 SCREW <M3×8>	6	
9	KSWB003 WASHER	6	
10	KCF9141 CAM BRACKET	2	
11	KCM2004A STEPPING MOTOR	2	
12	KSC0425 SCREW <M4×25>	4	
13	KSC0420 SCREW <M4×20>	2	
14	KSE0404 SETSCREW <M4×4>	2	
15	KSR1040 SCREW <M3×40>	4	
16	KCF9143 GEAR	2	
17	KSW0004 WASHER	6	

C

C

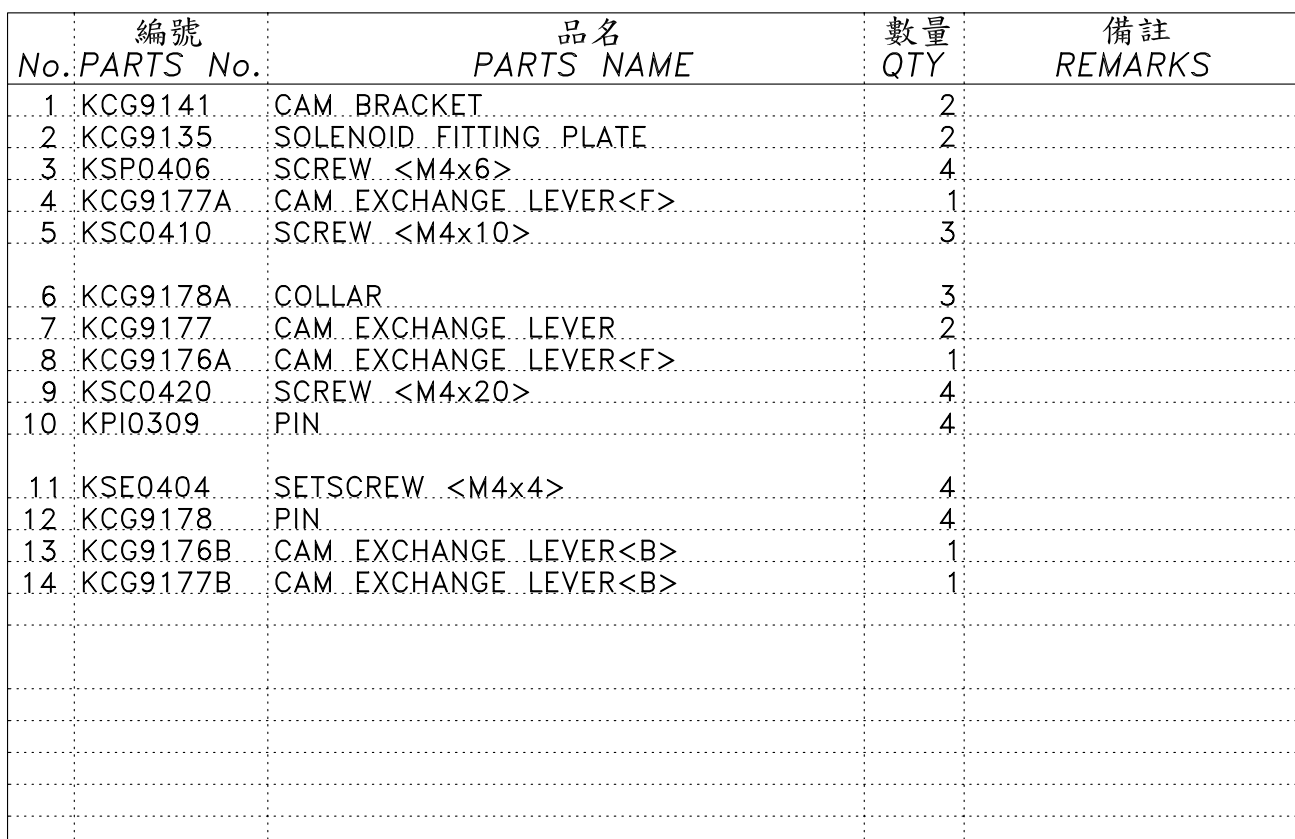


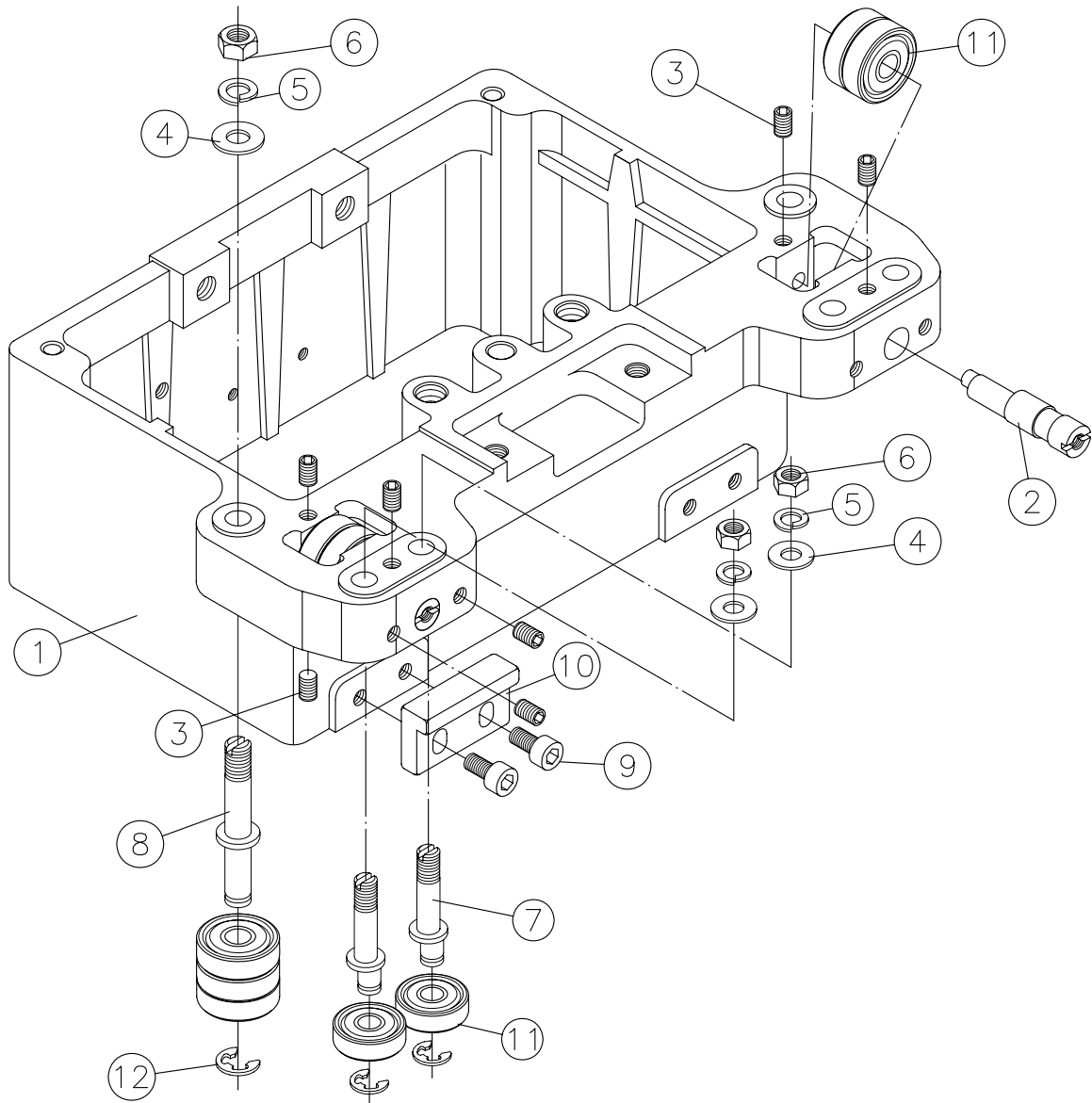
313J

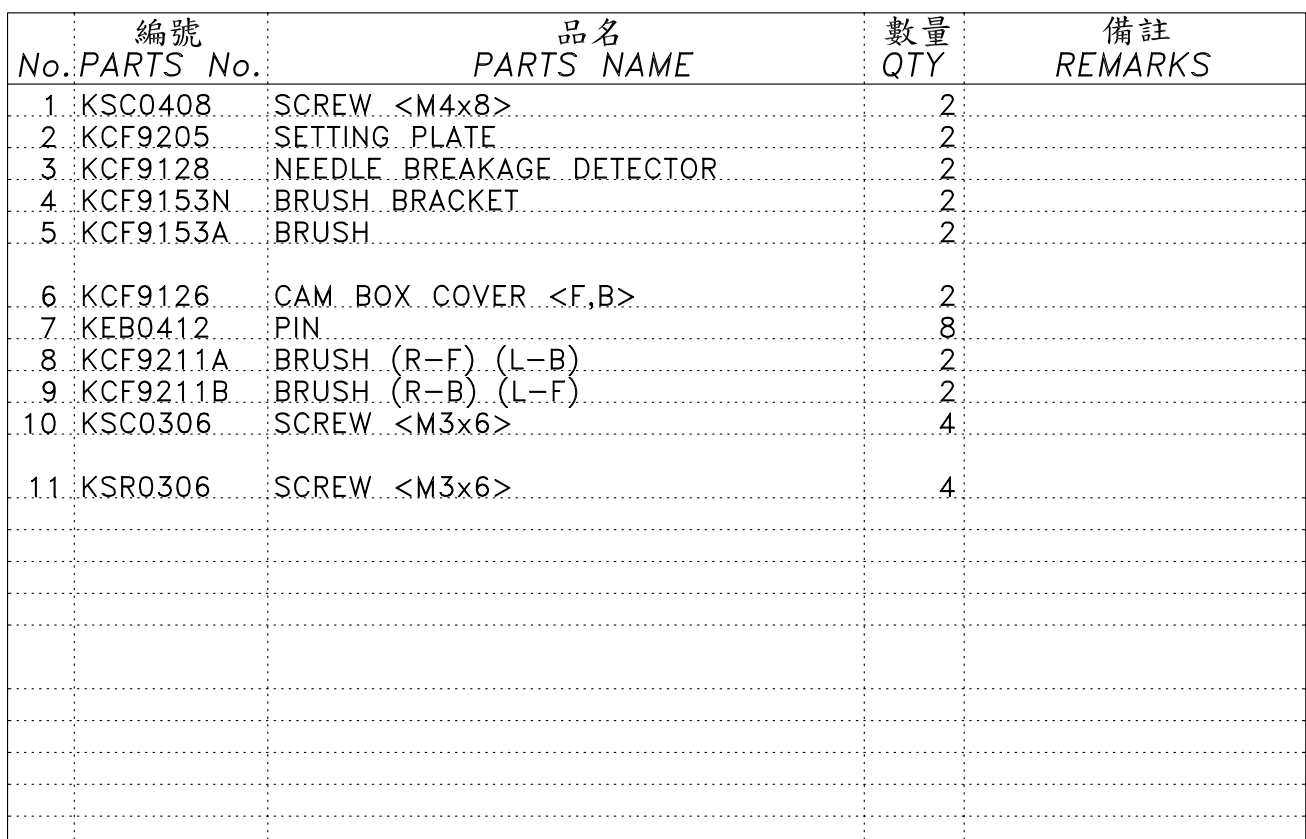
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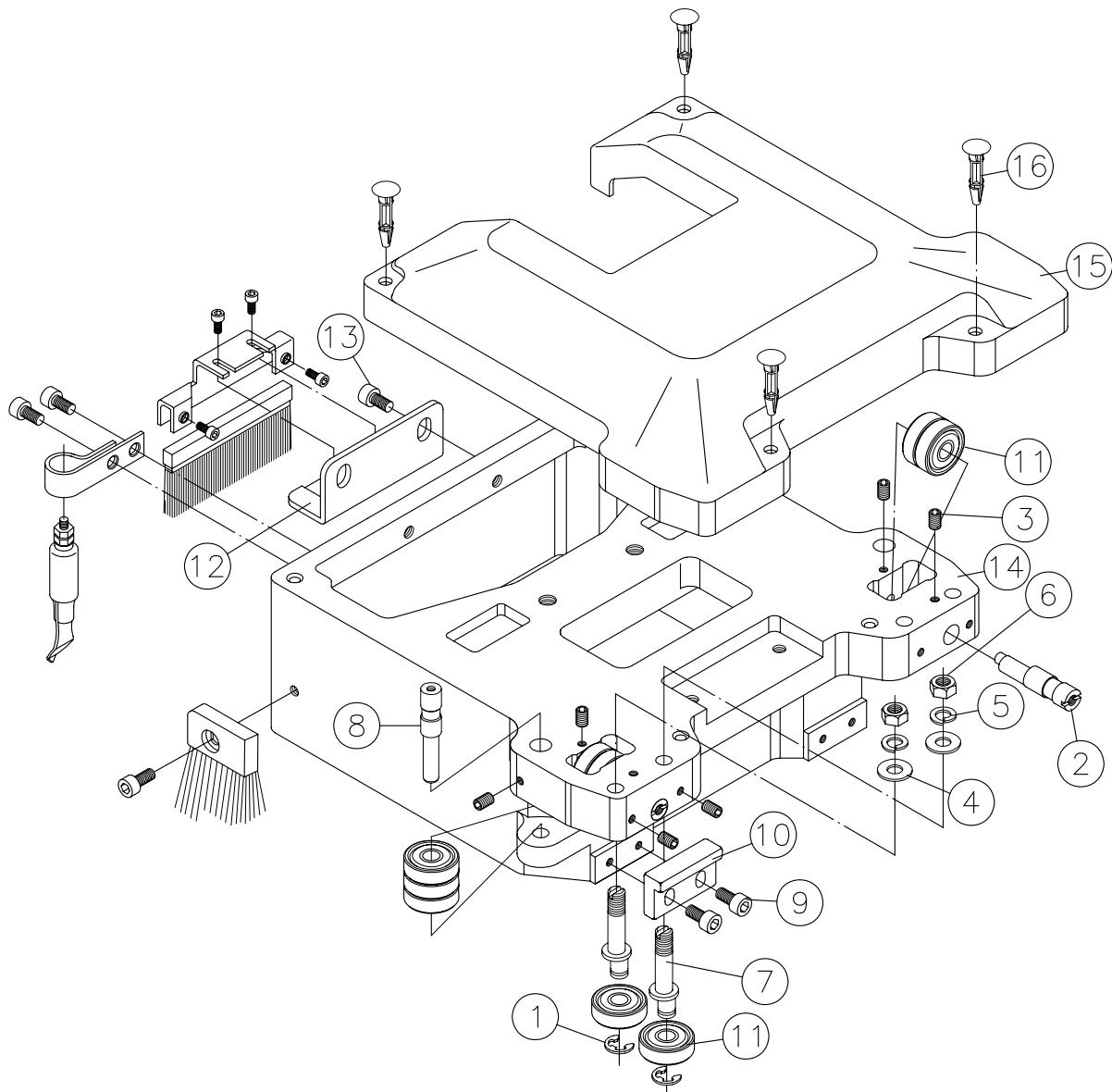
C

C



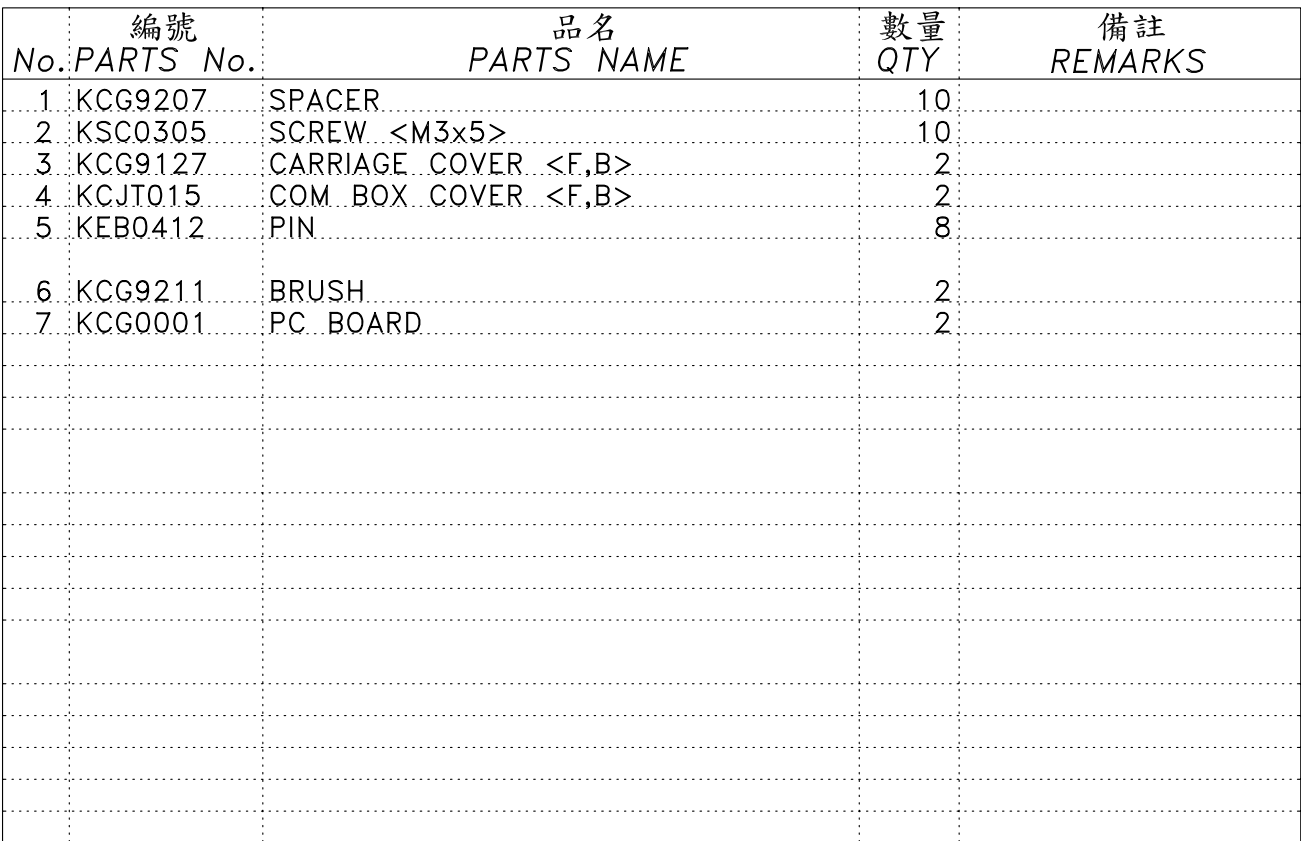
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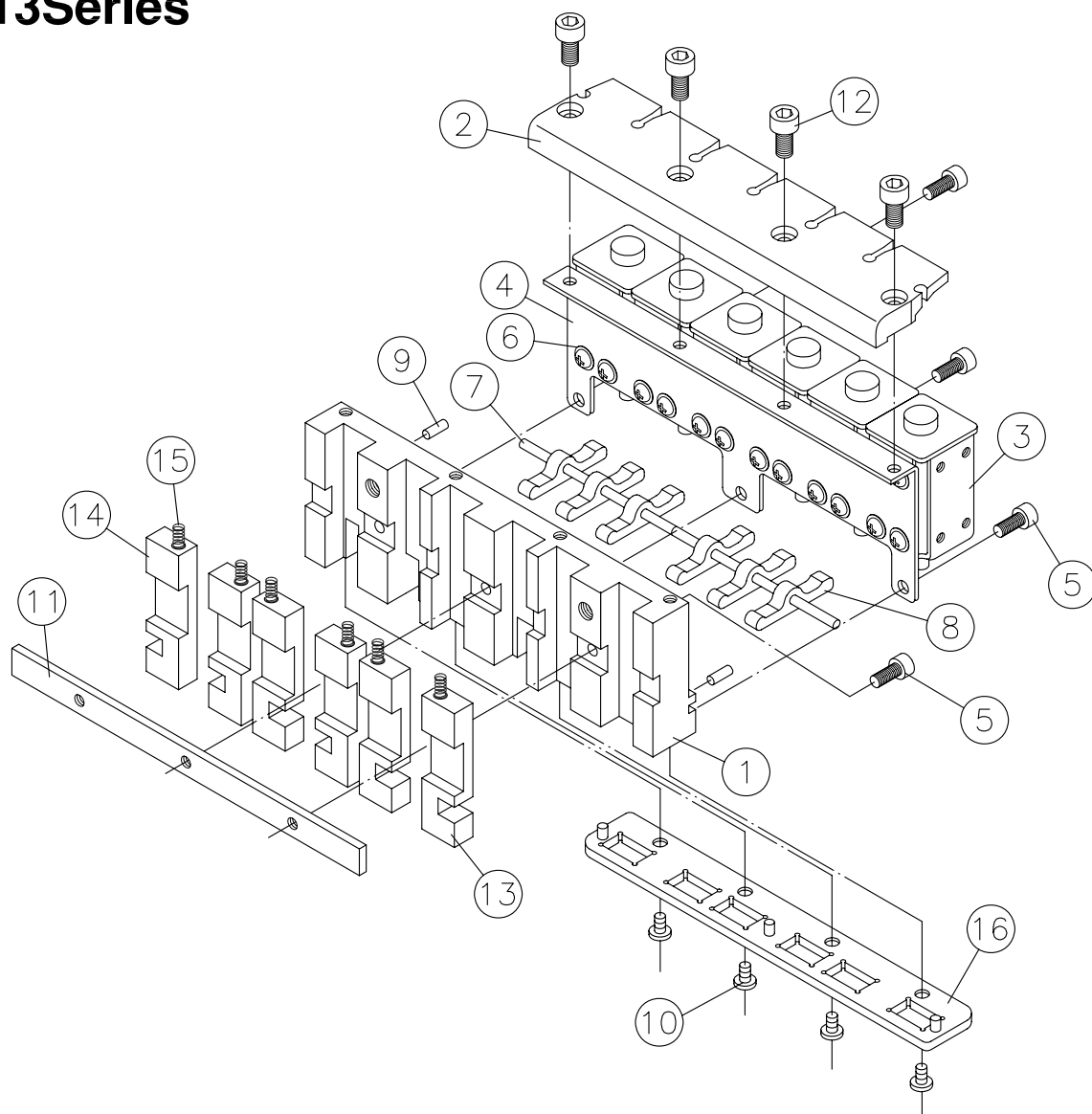


編號 No.	PARTS No.	品名 PARTS NAME	數量 QTY	備註 REMARKS
1	KPE0005	E-RING	12	
2	KCJ9133	BEARING PIN	4	
3	KSE0406	SETSCREW <M4x6>	32	
4	KSW0006	WASHER	8	
5	KWS006	SPRING WASHER	8	
6	KSN006	NUT	8	
7	KCJ9131	STEPPED SCREW	8	
8	KCJ9132	STEPPED SCREW	4	
9	KSC0412	SCREW <M4x12>	8	
10	KCJ9134	CARRIAGE GUIDE SLIDER	4	
11	KCB0626	BALL BEARING	28	
12	KCJ9153A	BRUSH BRACKET	2	
13	KSC0408	SCREW <M4x8>	4	
14	KCJ9127	CARRIAGE COVER	2	
15	KCJ3320	COM BOX COVER <F,B>	2	
16	KEB0412	PIN	8	

C



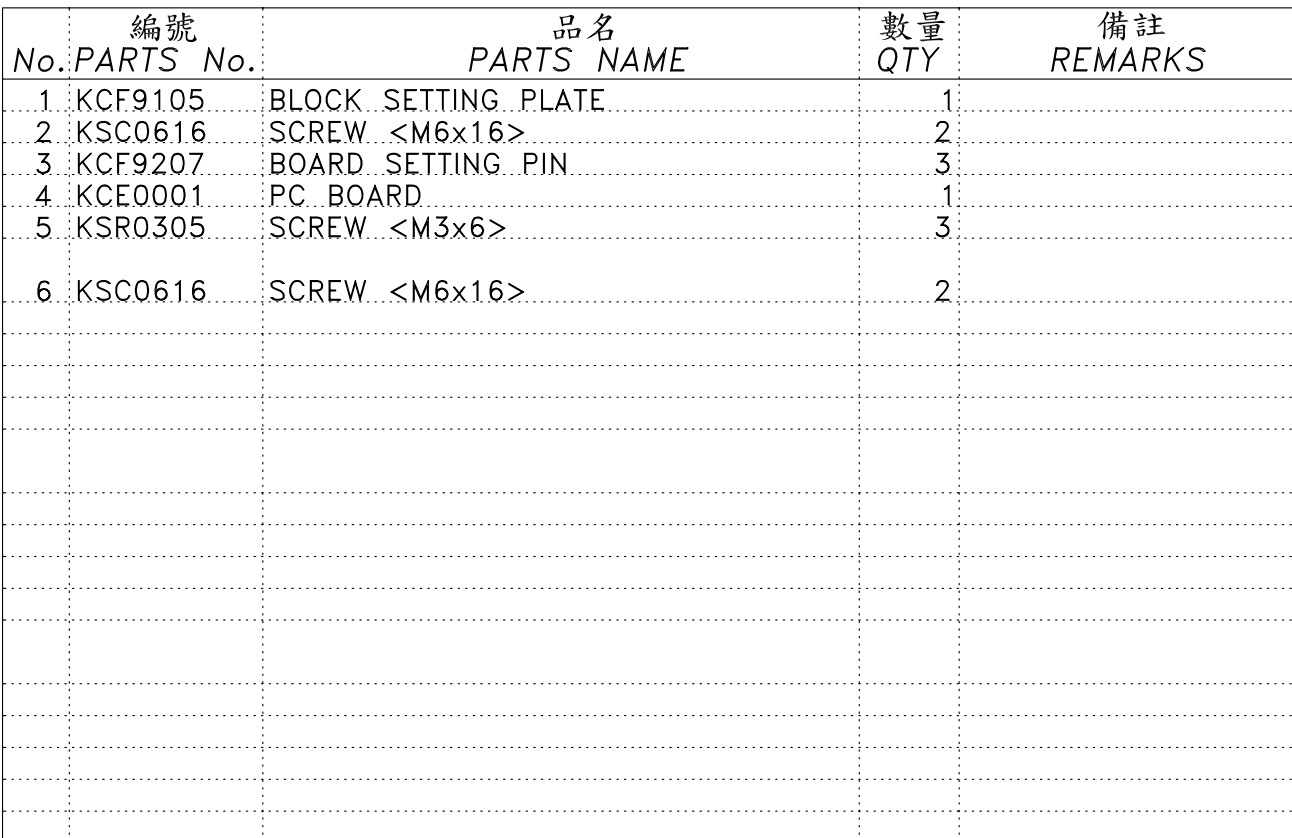
313Series



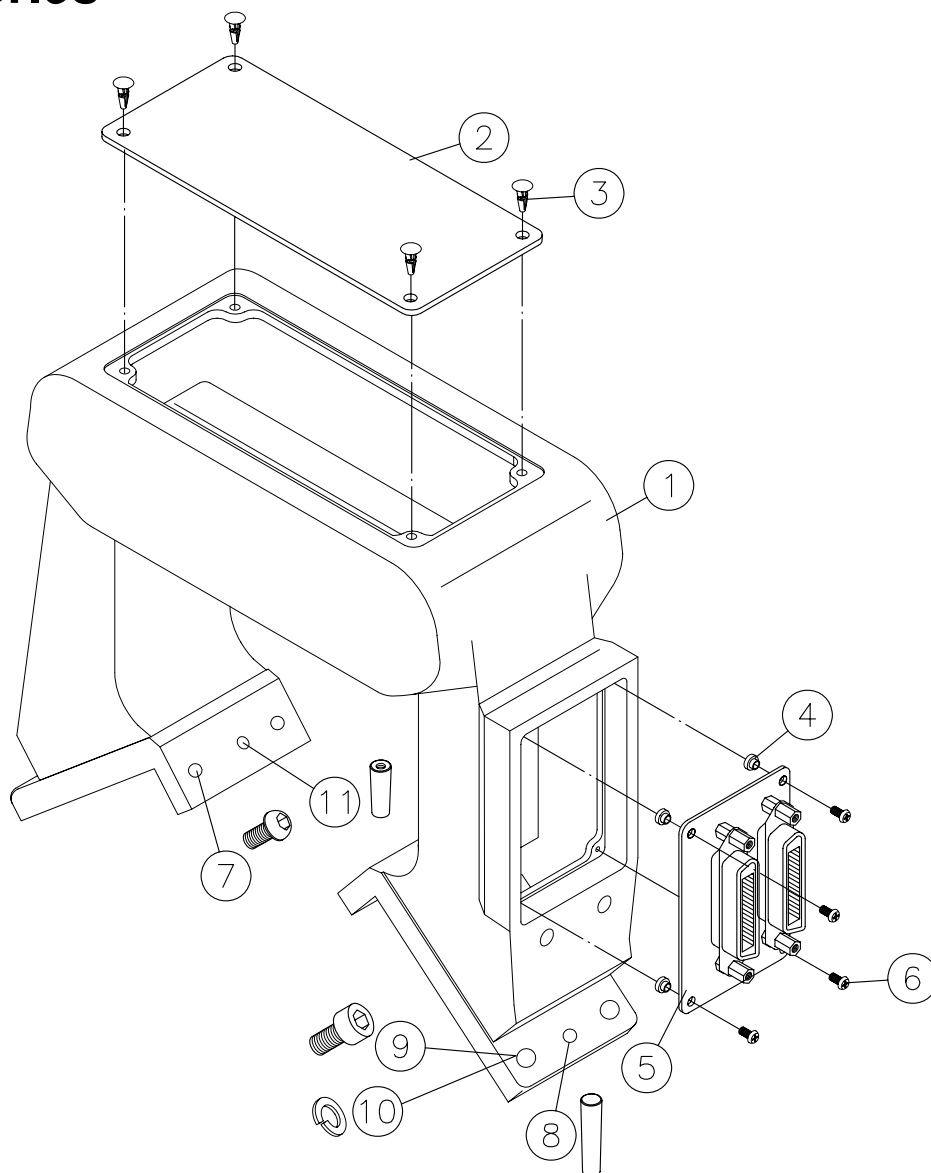
編號 No.	PARTS No.	品名 PARTS NAME	數量 QTY	備註 REMARKS
1	KCF9102	CARRIER CATCHING BLOCK	1	
2	KCF9107	PLUNGER STOPPER	1	
3	KCE2501	SOLENOID	6	
4	KCF9100	SOLENOID FITTING PLATE	1	
5	KSC0410	SCREW <M4x10>	6	
6	KSR0305	SCREW <M3x5>	24	
7	KCF9117	LEVER PIN	2	
8	KCF9116	PIN ACTING LEVER	6	
9	KPI0309	PIN	2	
10	KSP0406	SCREW <M4x6>	4	
11	KCF9111N1	PIN STOPPER	1	
12	KSC0412	SCREW <M4x12>	4	
13	KCF9109N1	CARRIER CATCHING <A>	3	
14	KCF9110N1	CARRIER CATCHING 	3	
15	KCF9114	PUSH SPRING	6	
16	KCF9112N	SOLENOID FITTING PLATE	1	

C

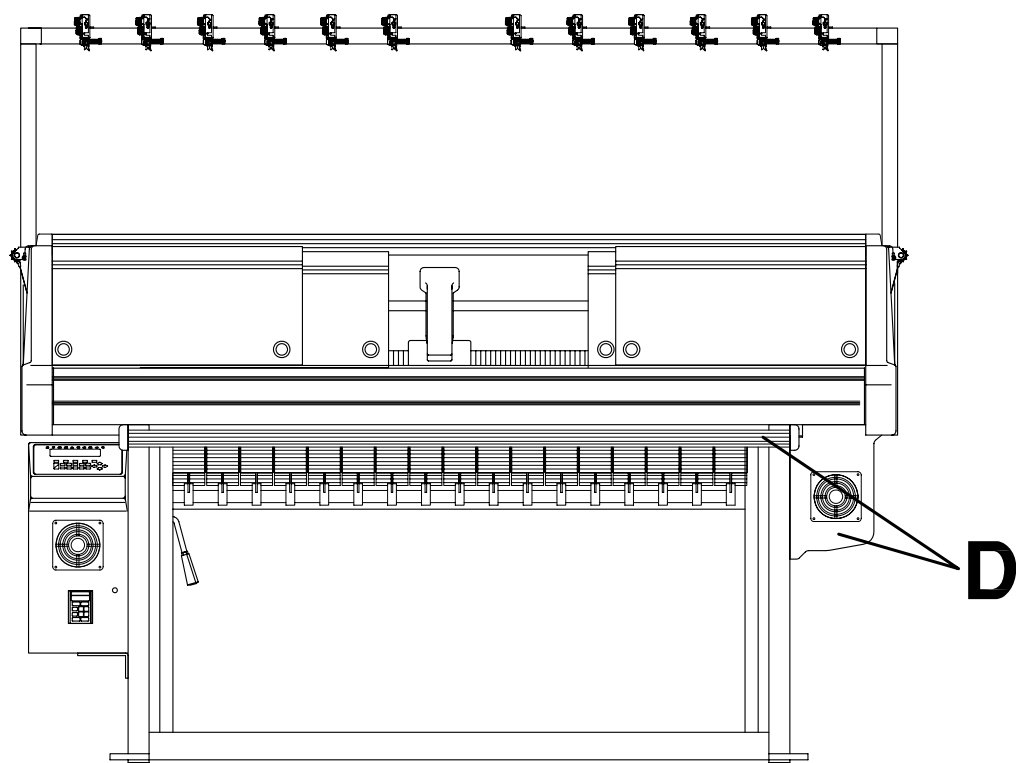
C



313Series

[illegible]

C



傳動裝置 /Driving Equipment:

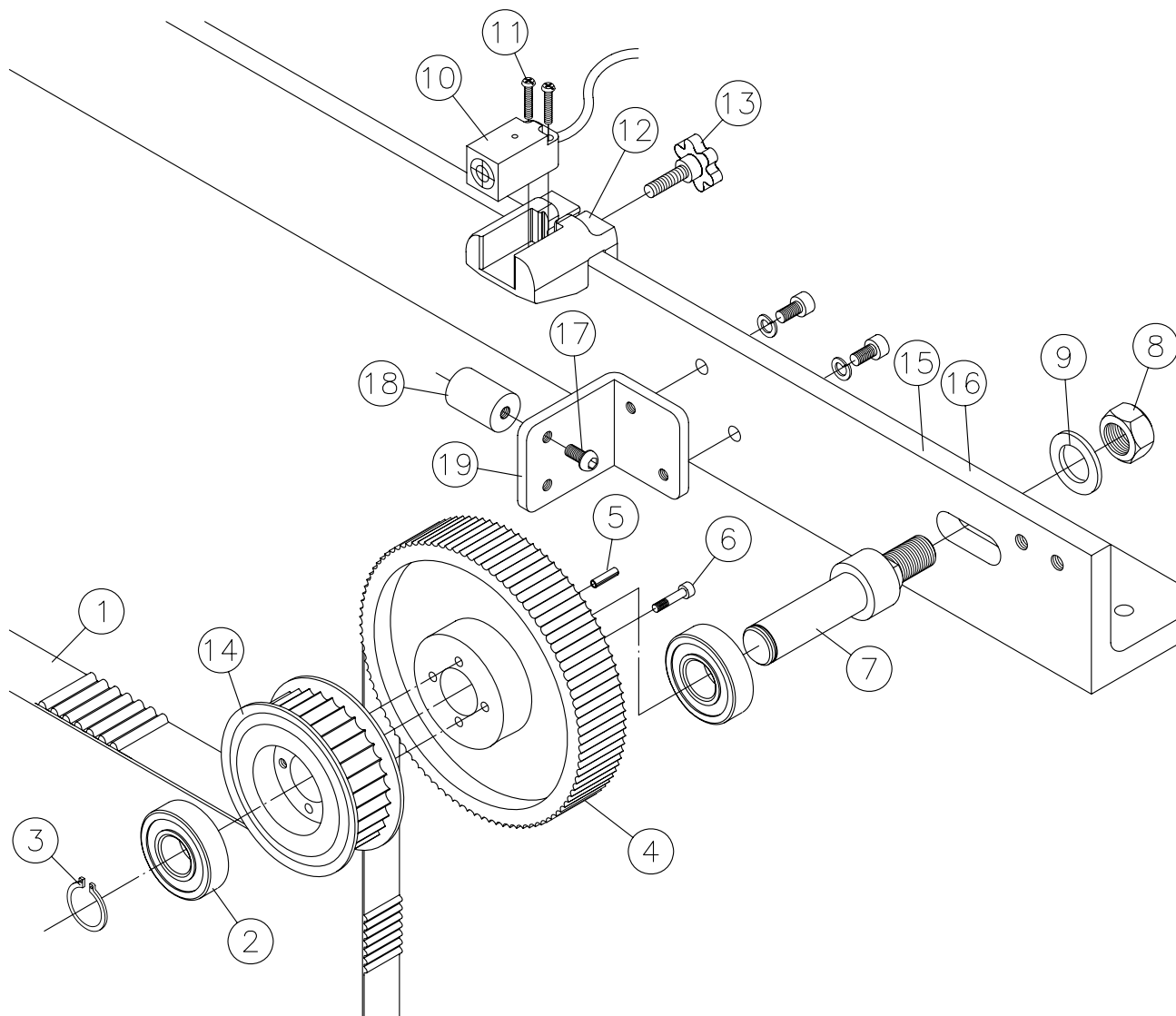
D1-D6

This exploded view diagram illustrates the assembly of a motor unit onto a vertical support structure. The components are identified by numbered callouts:

- 1**: The main motor housing with cooling fins.
- 2**: A mounting bracket or flange that connects the motor to the support.
- 3**: A terminal box or electrical enclosure mounted on the side of the motor.
- 4**: A screw used to secure the terminal box.
- 5**: A small rectangular component, possibly a label or a sensor, mounted near the terminal box.
- 6**: A washer or spacer ring used in the mounting assembly.
- 7**: A small connector or pin used in the terminal box assembly.
- 8**: A screw used to secure the mounting bracket to the support.
- 9**: A nut used to secure the mounting bracket to the support.
- 10**: A vertical support rail or track.
- 11**: A screw used to secure a component to the support structure.

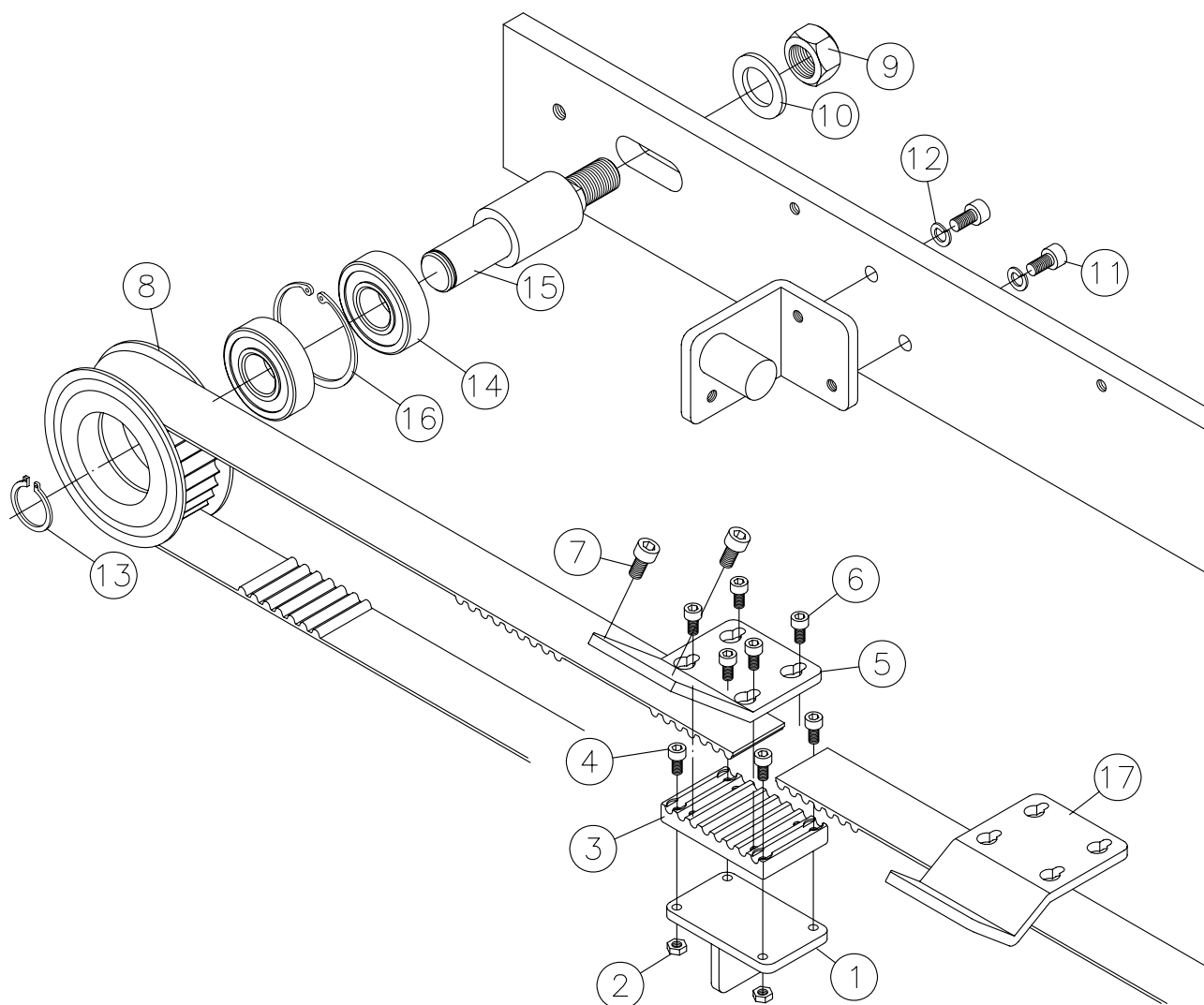
D

313Series



No.	編號 PARTS No.	品名 PARTS NAME	數量 QTY	備註 REMARKS
1	KCF9053	TIMING BELT	1	30",40",54"
2	KCB6205	BALL BEARING	2	
3	KSEC019	RING	1	
4	KCF9045	PULLEY	1	
5	KPC0530	PIN	2	
6	KSC0525	SCREW <M5x25>	2	
7	KCF9046A	REDUCTION SHAFT	1	
8	KSN0016	NUT	1	
9	KSW0016	WASHER	1	
10	KCF9034	SENSOR	4	
11	KSR0318	SCREW <M3x18>	8	
12	KCK9038S	SENSOR HOLDING PLATE	4	
13	KCK9038R	SCREW	4	
14	KCF9051	PULLEY	1	
15	KCK9574	DRIVEN GUIDE STAY	1	313 30",40",54"
16	KCDJ203	DRIVEN GUIDE STAY	1	313J&TJ
17	KSD0620	SCREW <M6x20>	2	
18	KCF9062	STOPPER	2	
19	KCF9061	STOPPER HOLDING PLATE	2	

313Series



No.	編號 PARTS No.	品名 PARTS NAME	數量 QTY	備註 REMARKS
1	KCK9060	STOPPER PLATE	1	
2	KSN0004	NUT	4	
3	KCF9042	BELT PRESSER	1	
4	KSC0420	SCREW <M4x20>	4	
5	KCF9040	CARRIAGE CONNECTING PLATE	1	313
6	KSC0416	SCREW <M4x16>	4	
7	KSD0616	SCREW <M6x16>	2	
8	KCDJ200	DRIVEN PULLEY	1	
9	KSN0016	NUT	1	
10	KSW0016	WASHER	1	
11	KSC0616	SCREW <M6x16>	4	
12	KWS006	SPRING WASHER	4	
13	KSEC019	RING	1	
14	KCB6203	BALL BEARING	2	
15	KCDJ201	DRIVEN PULLEY SHAFT	1	
16	KSEC052	RING	1	
17	KCJ9042	CARRIAGE CONNECTING PLATE	1	313J&TJ

D

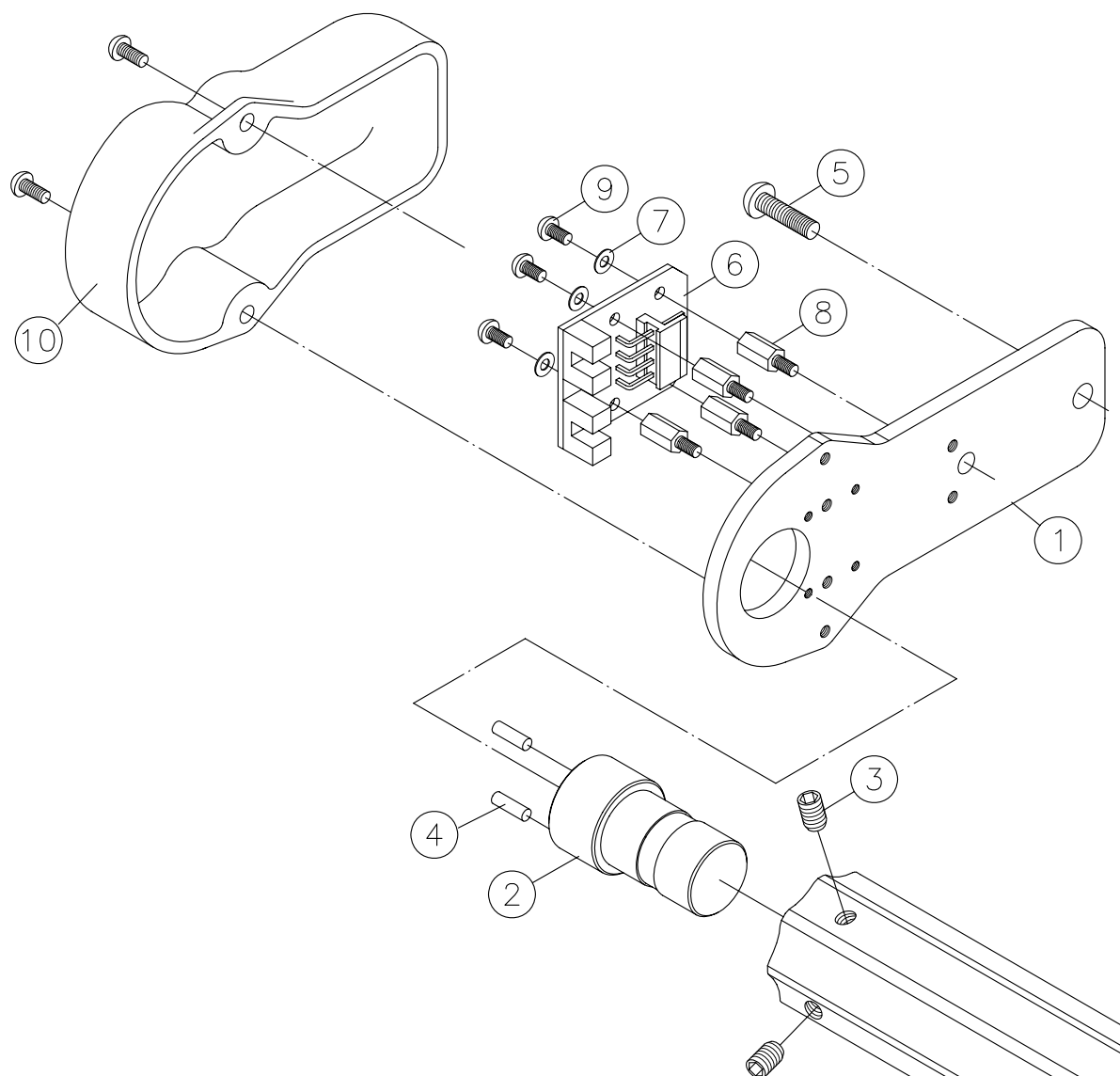
This diagram illustrates the assembly of a cable management system. The components are numbered as follows:

- 1**: A vertical mounting plate with two circular cutouts.
- 2**: A small L-shaped bracket with two circular holes.
- 3**: A small L-shaped bracket with one circular hole.
- 4**: A small L-shaped bracket with one circular hole.
- 5**: A small L-shaped bracket with one circular hole.
- 6**: A small L-shaped bracket with one circular hole.
- 7**: A long, thin horizontal bar with two circular holes.
- 8**: A long, thin horizontal bar with two circular holes.
- 9**: A small L-shaped bracket with one circular hole.
- 10**: A small L-shaped bracket with one circular hole.

The diagram shows the assembly process for a cable management system. A long horizontal bar (7) is shown with a cable (8) running along its length. The bar is supported by a vertical plate (1) and a small bracket (2). The cable is secured by a series of small brackets (3, 4, 5, 6) and a small bracket (9). The cable is shown entering a large, curved duct on the right side of the diagram.

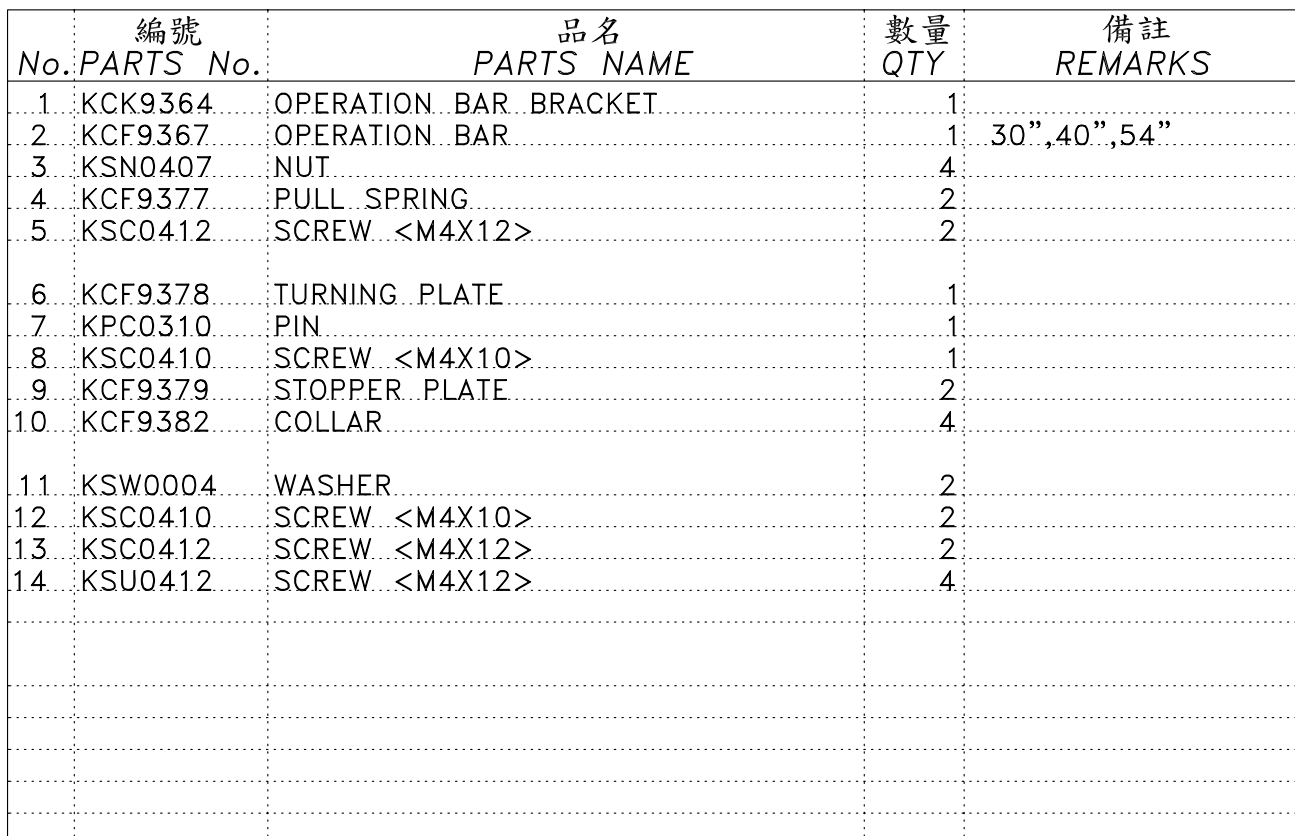
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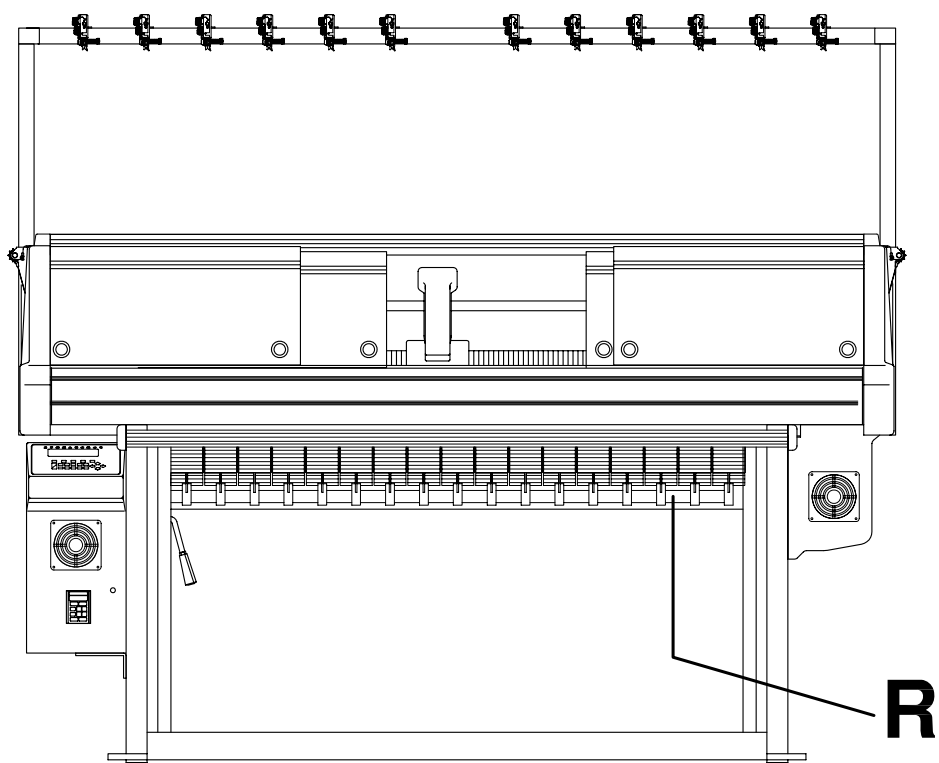
313Series

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D

D

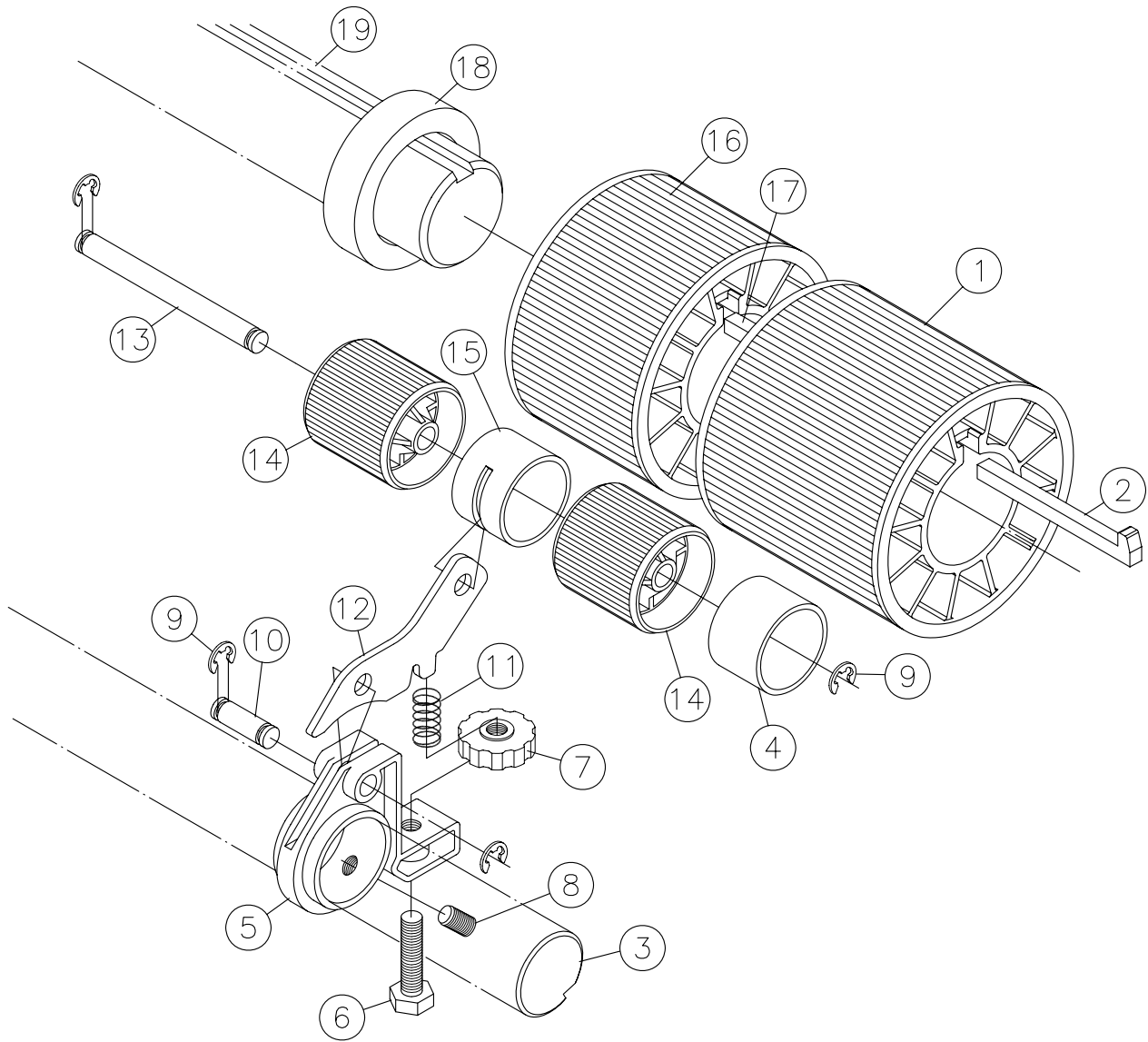




捲布装置 /Take-down Equipment:

R1-R7

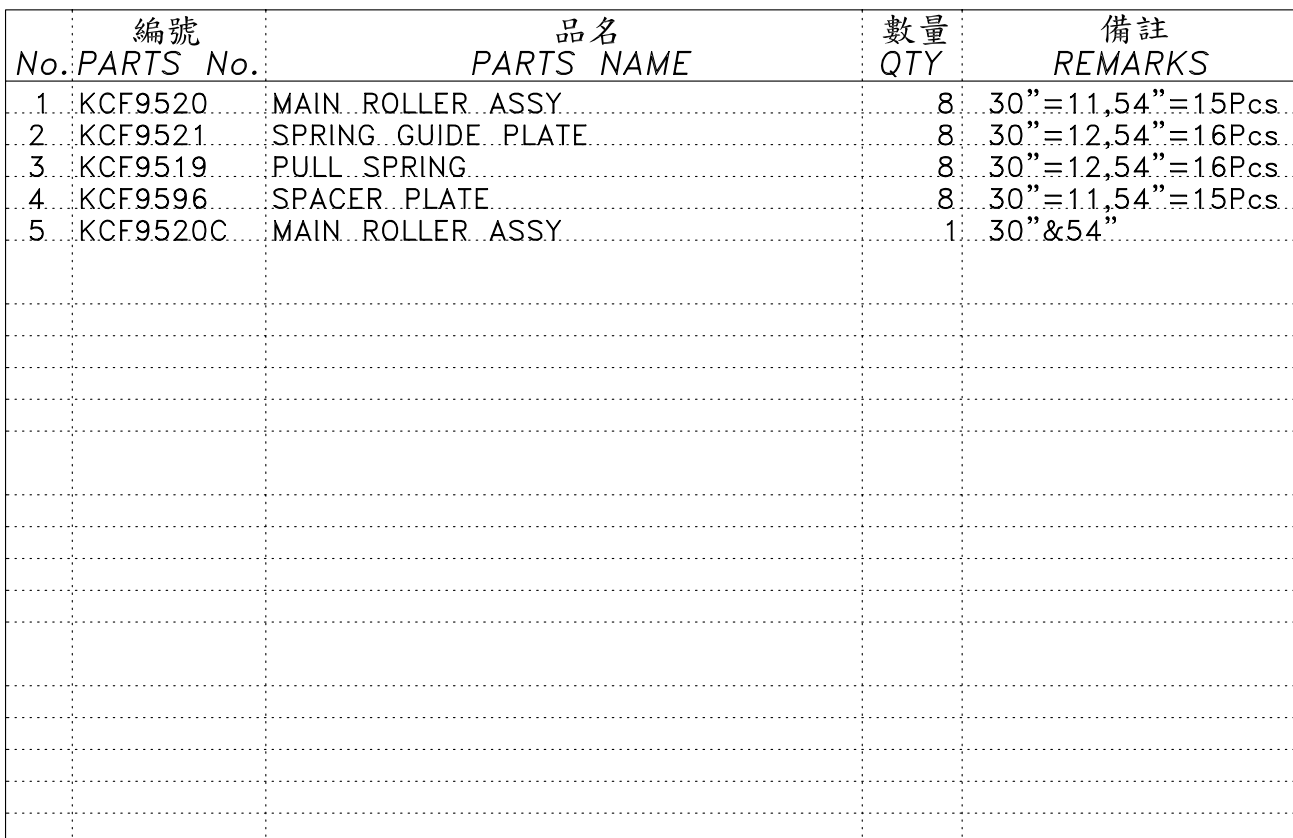
313Series



No.	編號 PARTS No.	品名 PARTS NAME	數量 QTY	備註 REMARKS
1	KCF9520S	MAIN ROLLER ASSY.	8	40"=11,54"=15Pcs
2	KCF9520CS	SPACER PLATE	8	40"=11,54"=15Pcs
3	KCDJ009B	SUB-ROLLER SHAFT	1	30",40",54"
4	KCF9543I	SPACER COLLAR	7	40"=10,54"=14Pcs
5	KCF9543AN	SUB-ROLLER GUIDE	8	40"=11,54"=15Pcs
6	KSS0830	SCREW <M8x30>	8	40"=11,54"=15Pcs
7	KCF9543B	KNOB NUT	8	40"=11,54"=15Pcs
8	KSE0808	SETSCREW <M8x8>	8	40"=11,54"=15Pcs
9	KPE0007	E-RING	32	40"=44,54"=60Pcs
10	KCF9543C	PIN	8	40"=11,54"=15Pcs
11	KCF9543D	PUSH SPRING	8	40"=11,54"=15Pcs
12	KCF9543EN	SUB-ROLLER ADJUSTING PLATE	8	40"=11,54"=15Pcs
13	KCF9543F	SUB-ROLLER HOLDING SHAFT	8	40"=11,54"=15Pcs
14	KCF9543G	SUB-ROLLER	16	40"=22,54"=30Pcs
15	KCF9543H	ROLLER COLLAR	8	40"=11,54"=15Pcs
16	KCF9520SC	MAIN ROLLER ASSY	1	30"&54"
17	KCF9520CSC	SPACER PLATE	1	30"&54"
18	KCDJ007	COLLAR	2	40"
19	KCDJ009A	MAIN ROLLER SHAFT	1	30",40",54"

R

R



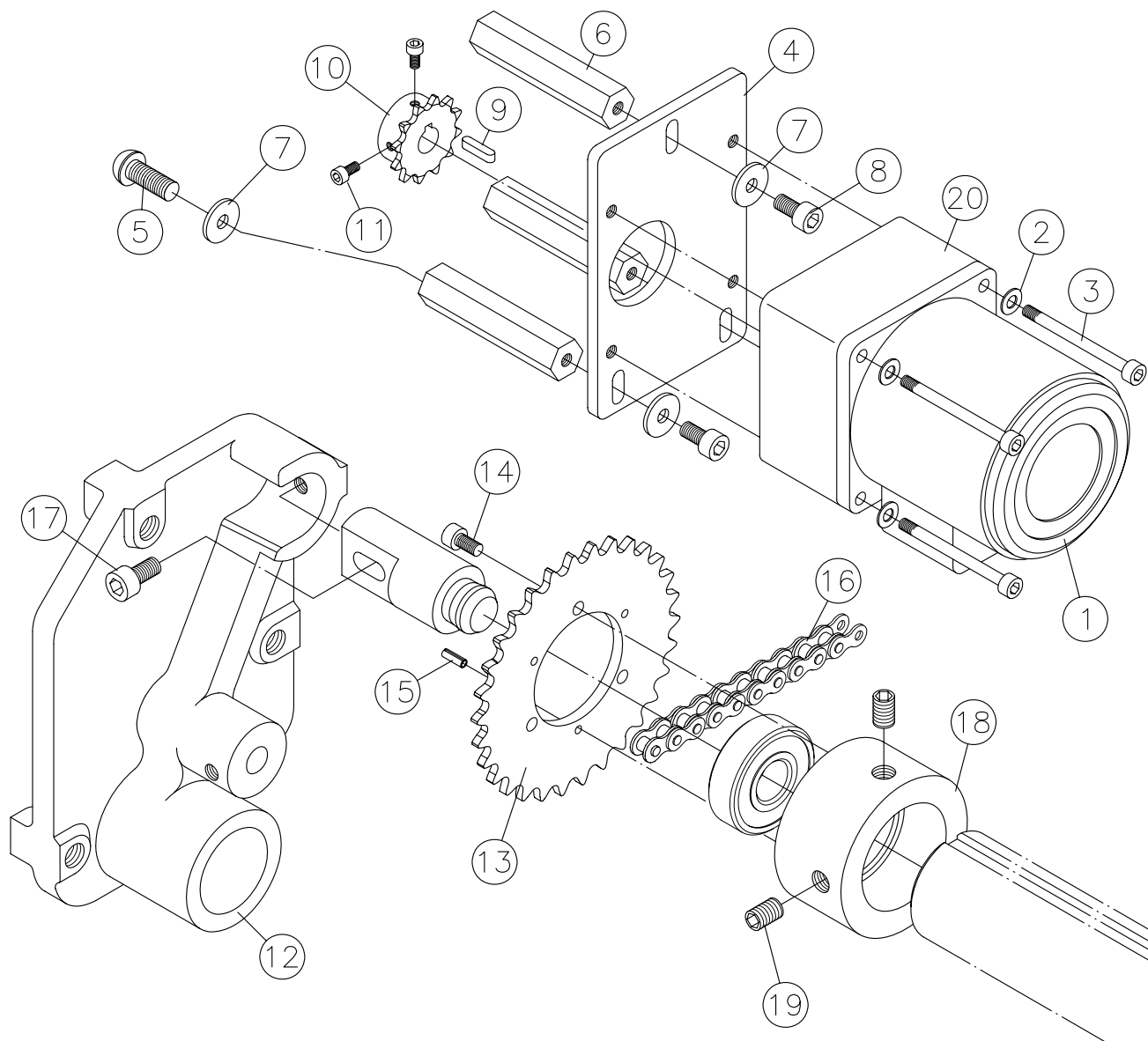
This diagram shows an exploded view of a mechanical assembly. The components are numbered as follows:

- 1: A large, curved metal bracket or housing.
- 2: A long, tapered metal rod or pin.
- 3: A small, cylindrical metal pin or dowel.
- 4: A smaller, curved metal bracket or housing.
- 5: A small, cylindrical metal pin or dowel.
- 6: A small, cylindrical metal pin or dowel.
- 7: A small, cylindrical metal pin or dowel.
- 8: A small, curved metal bracket or housing.
- 9: A small, curved metal bracket or housing.
- 10: A small, cylindrical metal pin or dowel.

The diagram illustrates the assembly sequence and the relative positions of these components. Dashed lines indicate the alignment and fit of the parts. The assembly includes a main bracket (1) with a tapered rod (2) passing through it. A smaller bracket (4) is attached to the main bracket with a pin (3). A spring (7) is shown between two small brackets (8 and 9). A small pin (5) is shown near the bottom of the main bracket. A small pin (6) is shown near the top of the main bracket. A small pin (10) is shown near the top of the main bracket.

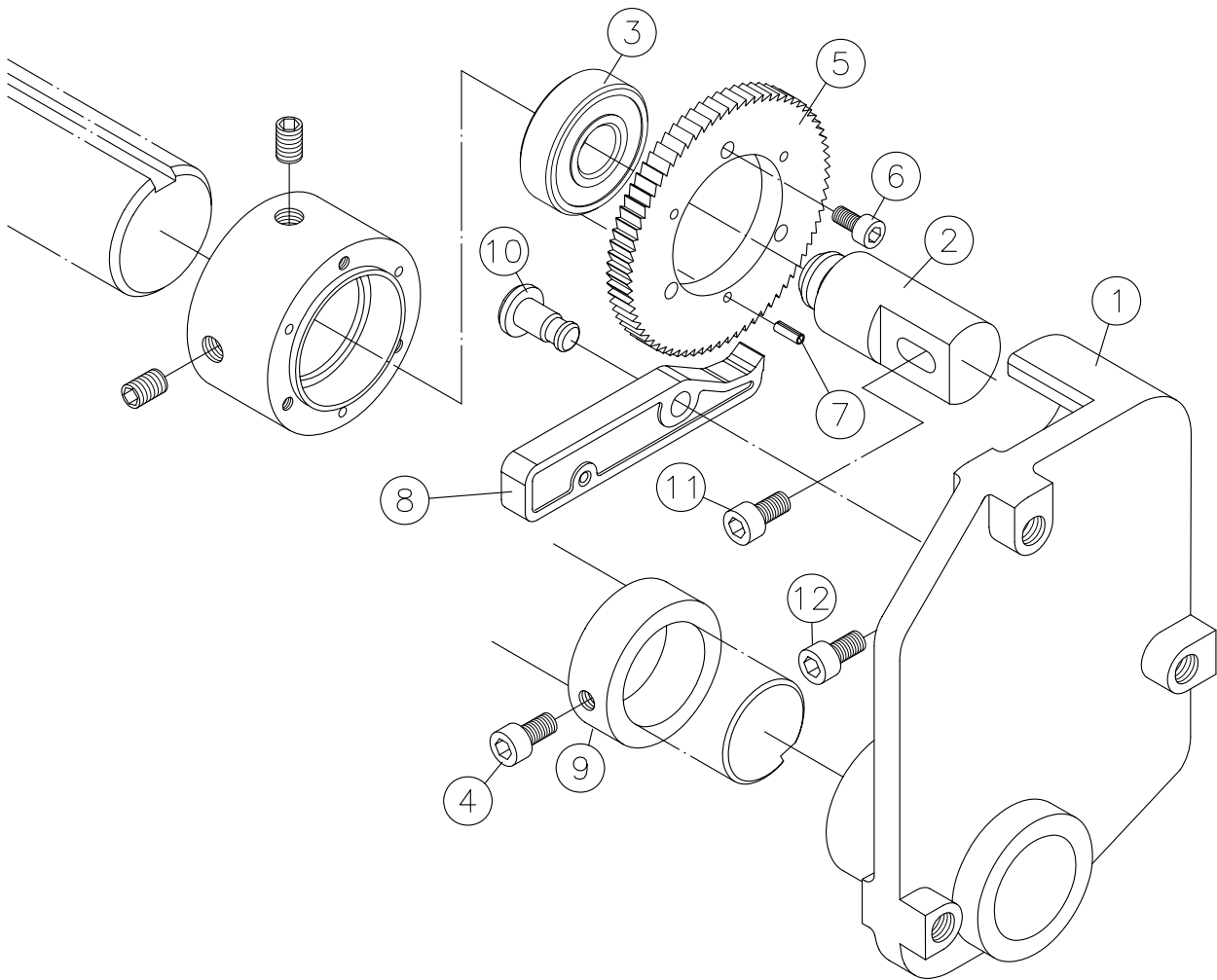
R

313Series



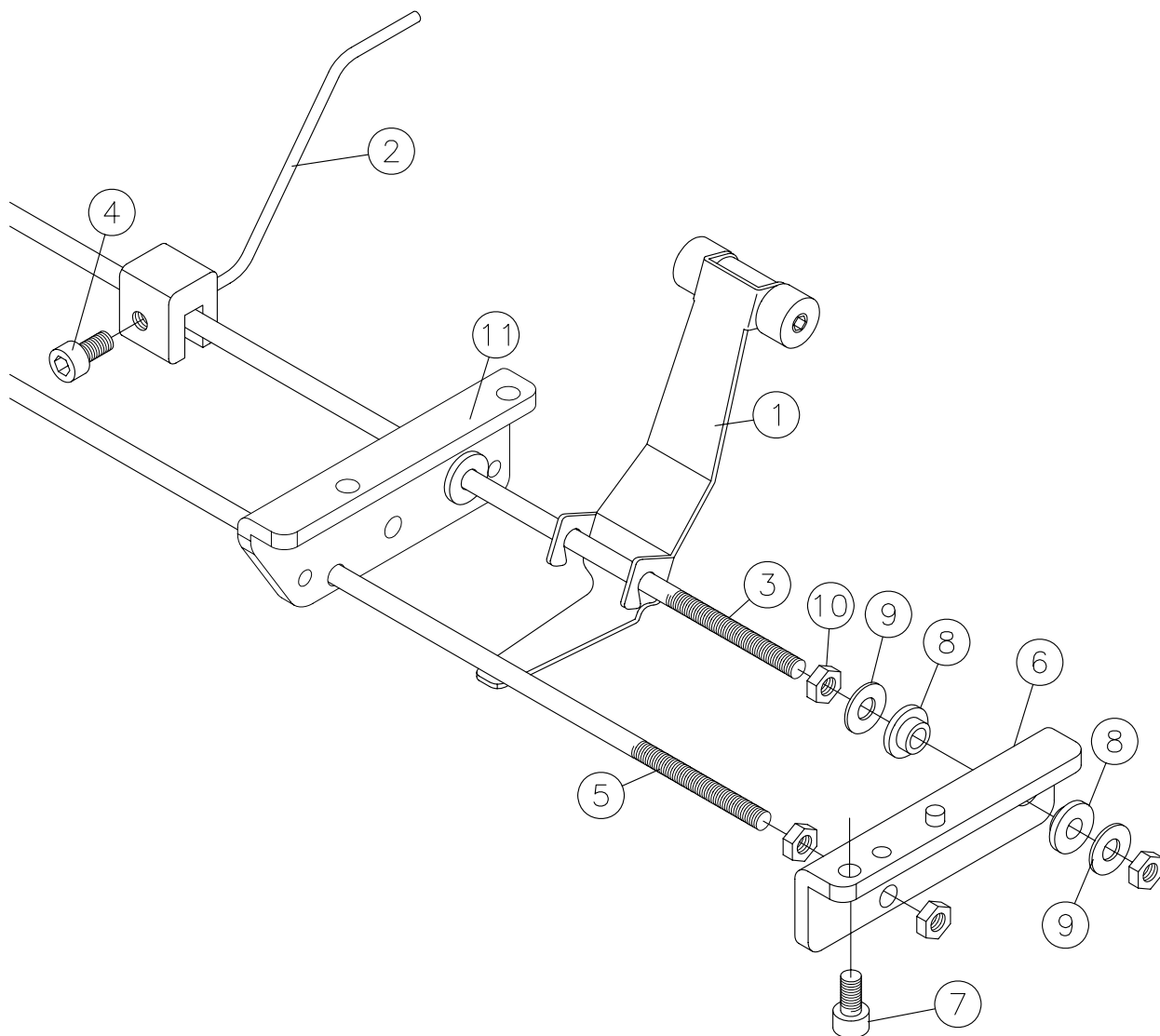
No.	編號 PARTS No.	品名 PARTS NAME	數量 QTY	備註 REMARKS
1	KCF9526	TAKE-DOWN MOTOR	1	
2	KSW0006	WASHER	4	
3	KSM0680	SCREW <M6x80>	4	
4	KCF9522	MOTOR BASE	1	
5	KSD0620	SCREW <M6x20>	3	
6	KCF9523	BASE SET PIN	3	
7	KSW0006	WASHER	6	
8	KSC0616	SCREW <M6x16>	3	
9	KEY0004	KEY	1	
10	KCF9528	SPROCKET	1	
11	KSC0412	SCREW <M4x12>	2	
12	KCF9501	BRACKET <L>	1	
13	KCF9508	SPROCKET	1	
14	KSC0416	SCREW <M4x16>	3	
15	KPC0412	PIN	3	
16	KCF9510	CHAIN	1	
17	KSC0630	SCREW <M6x30>	1	
18	KCF9506	FLANGE	2	
19	KSE0812	SETSCREW <M8x12>	4	
20	KCF9526A	TAKE-DOWN GEAR	1	

313Series

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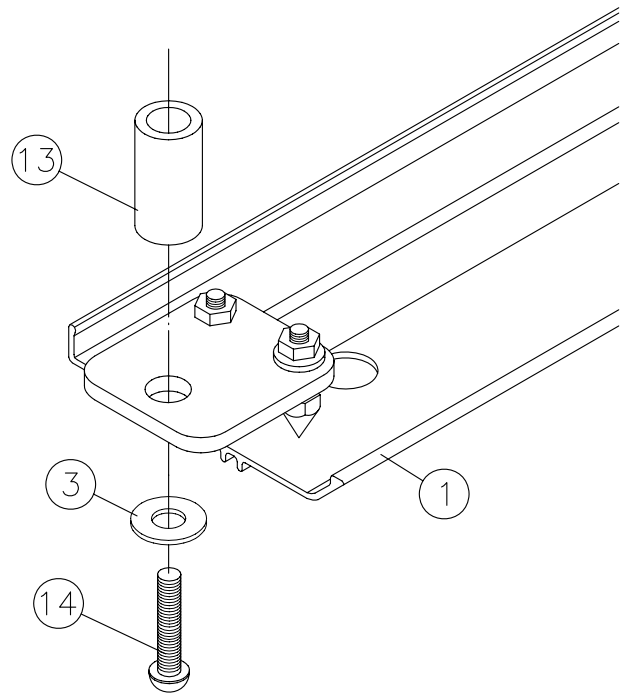
R

R

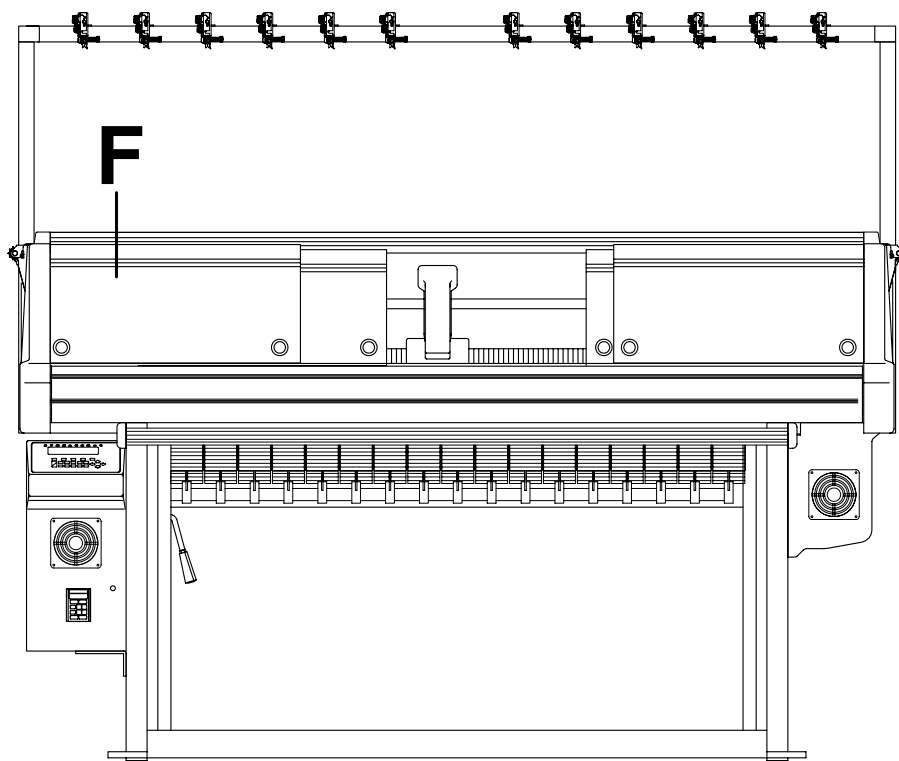


-R6-

This diagram illustrates the exploded view of a mechanical assembly, with components numbered 1 through 12. The assembly consists of a main plate (12) and a base plate (1). The main plate (12) is secured to the base plate (1) using a bolt (11) and a washer (10). A spring (8) is positioned between the main plate (12) and the base plate (1). A pin (7) is used to secure the main plate (12) to the base plate (1). A nut (5) and a washer (6) are used to secure the main plate (12) to the base plate (1). A pin (9) is used to secure the main plate (12) to the base plate (1). A pin (3) is used to secure the main plate (12) to the base plate (1). A pin (4) is used to secure the main plate (12) to the base plate (1). A pin (2) is used to secure the main plate (12) to the base plate (1).



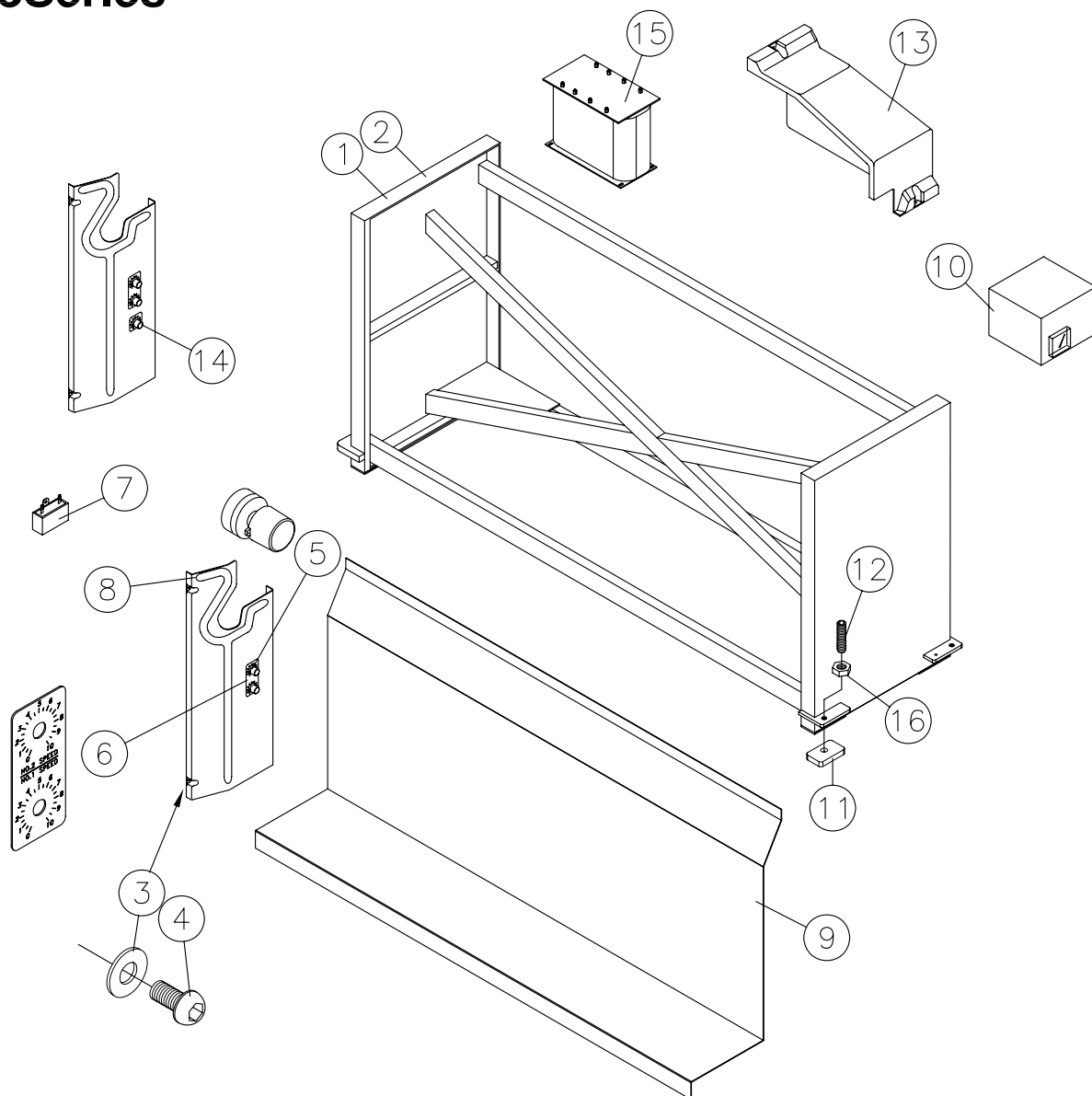
R



主體與護蓋 /Frame & Cover:

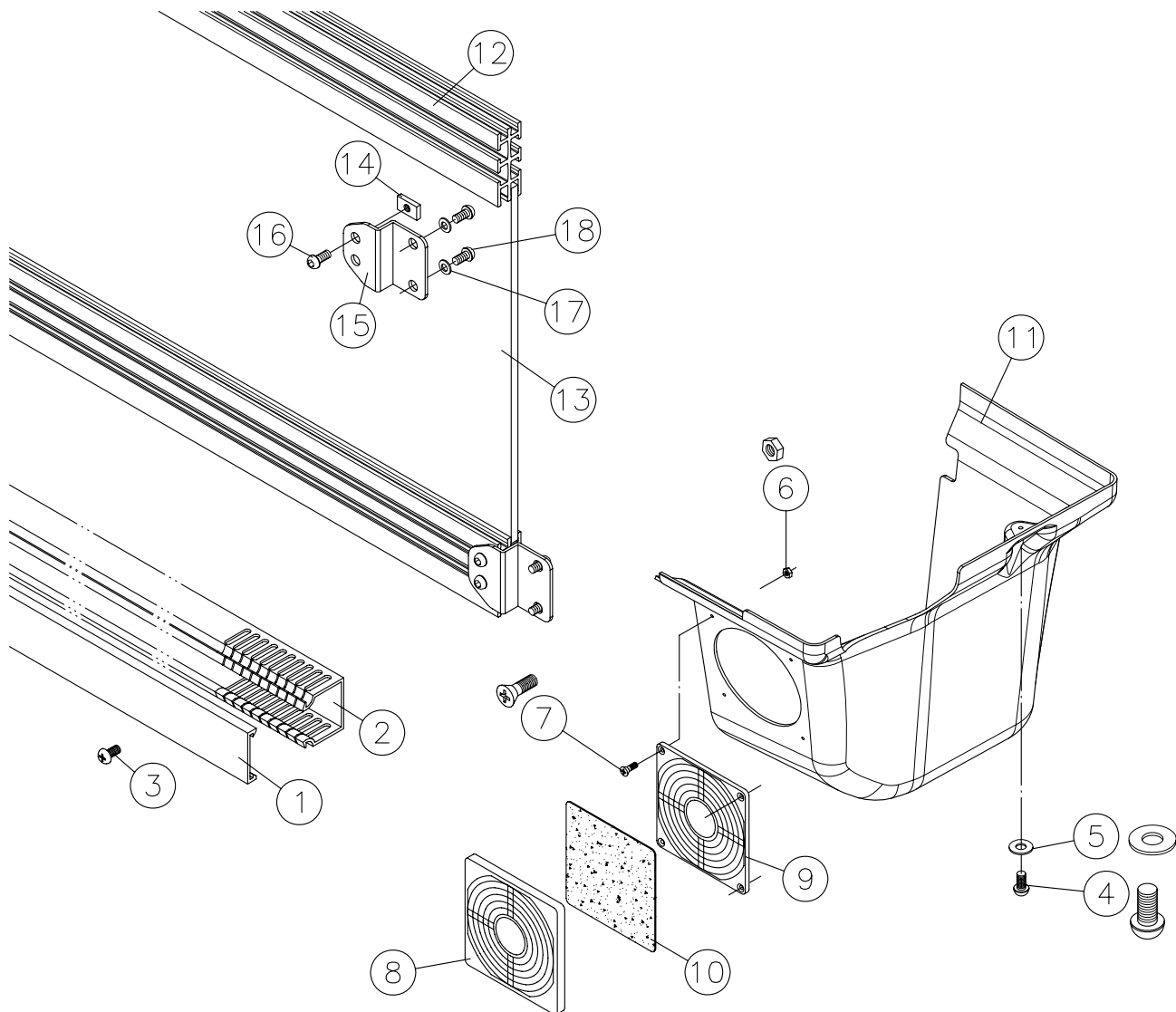
F1-F4

313Series



編號		品名	數量	備註
No.	PARTS No.	PARTS NAME	QTY	REMARKS
1	KCK9573	FRAME	1	31.3, 30", 40", 54"
2	KCDJ202	FRAME	1	31.3J&TJ
3	KSW0006	WASHER	4	
4	KSD0612	SCREW <M6x12>	4	
5	KCF9532	TURNING KNOB	2	
6	KCF9589	NUMERIC BOARD	1	
7	KCF9534	CAPACITOR FOR TAKE-DOWN MOTOR	1	
8	KCK9577	FRAME COVER <L,R>	2	
9	KCDJ006	FRAME COVER	1	30", 40", 54"
10	KCF9714	A.V.R	1	
11	KCL3069S6	FRAME BASE	4	
12	KSE1250	SET SCREW <M12X50>	4	
13	KCF9703	COVER	1	
14	KCF9532A	3RD TURNING KNOB ASSY		OPTION
15	KCF9705B	380V TO 220V TRANSFORMER		OPTION
16	KSN0012	UNT	4	

313Series



No.	編號 PARTS No.	品名 PARTS NAME	數量 QTY	備註 REMARKS
1	KCF9595	CABLE GUIDE COVER	1	
2	KCF9594	CABLE GUIDE	1	
3	KSR0408	SCREW <M4x8>	4	
4	KSD0612	SCREW <M6x12>	1	30",40",54"
5	KSW0006	WASHER	1	30",40",54"
6	KSN0004	NUT	4	
7	KSV0410	SCREW <M4x10>	4	
8	KCF9597	FILTER FITTING PLATE <A>	1	
9	KCF9598	FILTER FITTING PLATE 	1	
10	KCF9599	FILTER	1	
11	KCK9588	MAIN MOTOR COVER	1	
12	KCDJ012	COVER RAIL	2	30",40",54"
13	KCK9586	BACK COVER	2	30",40",54"
14	KCF9070	NUT	8	
15	KCL3121	HOLDING PLATE	4	
16	KSD0606	SCREW <M6x6>	8	
17	KSW0006	WASHER	8	
18	KSD0610	SCREW <M6x10>	8	

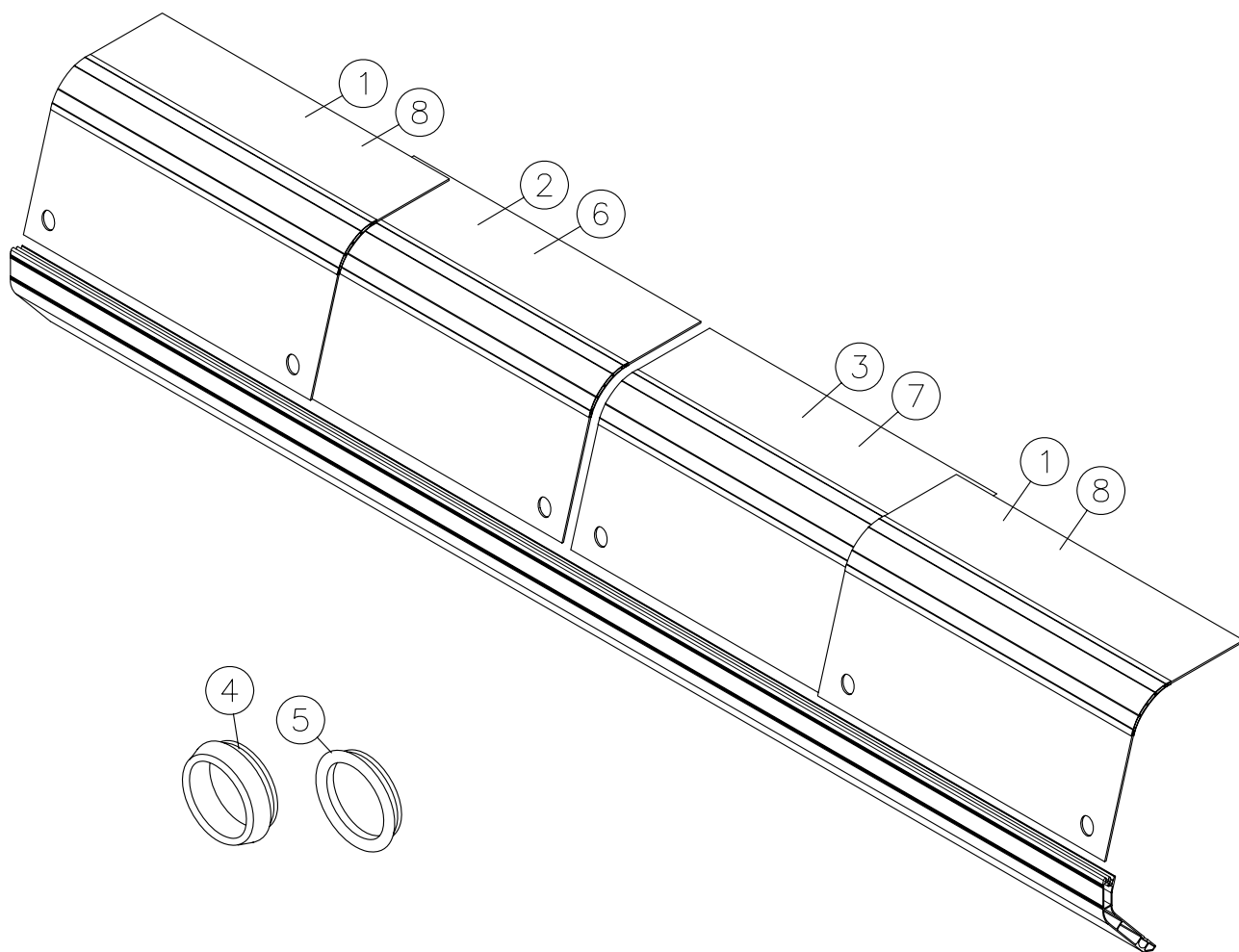
F

This exploded view diagram illustrates the assembly of a washing machine door. The components are numbered as follows:

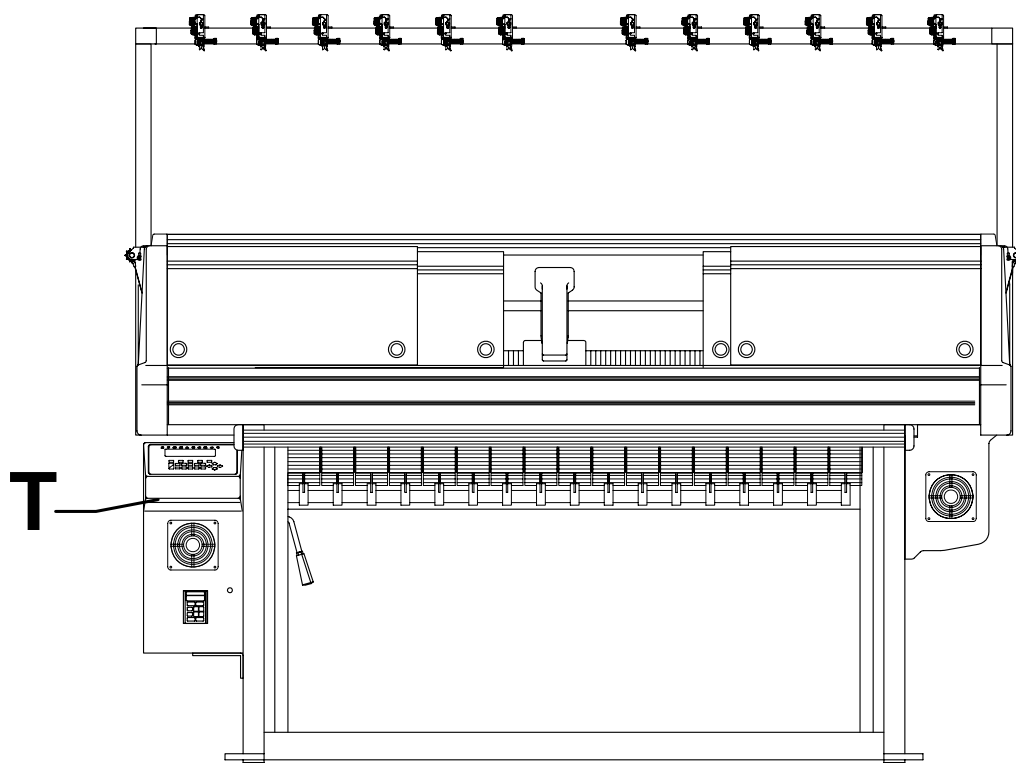
- 1**: Main door panel.
- 2**: Upper door frame or hinge support.
- 3**: Screws used for mounting the door panel to the frame.
- 4**: Washers or spacers used in conjunction with the screws.
- 5**: A bracket or hinge component.
- 6**: A small rectangular plate or gasket.
- 7**: A long, thin component, likely a door seal or gasket.
- 8**: A small metal bracket or clip.
- 9**: A cylindrical component, possibly a lock or latch.
- 10**: A long, thin component, likely a door seal or gasket.
- 11**: A small rectangular plate or gasket.

F

313Series

[illegible]

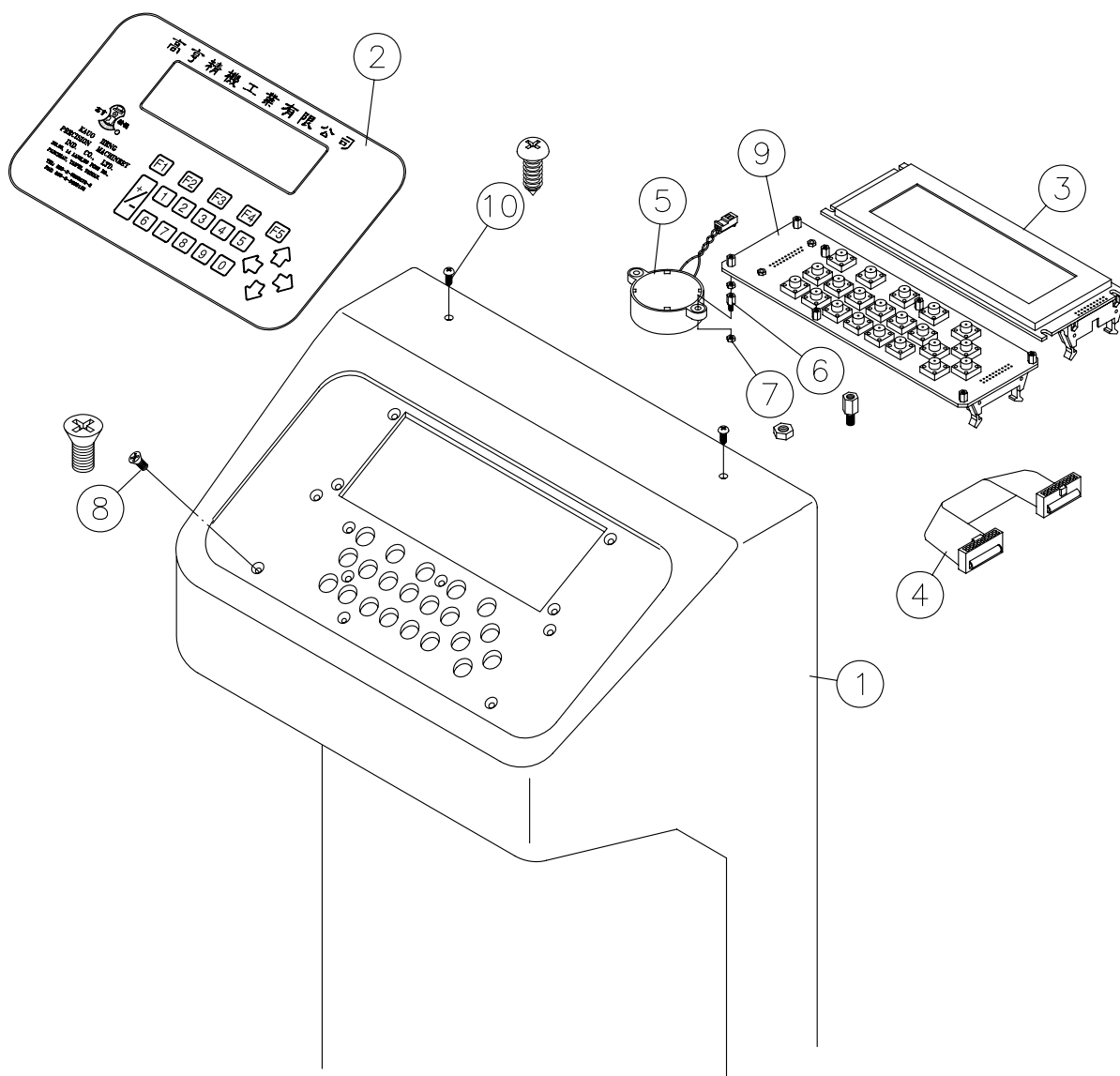
F



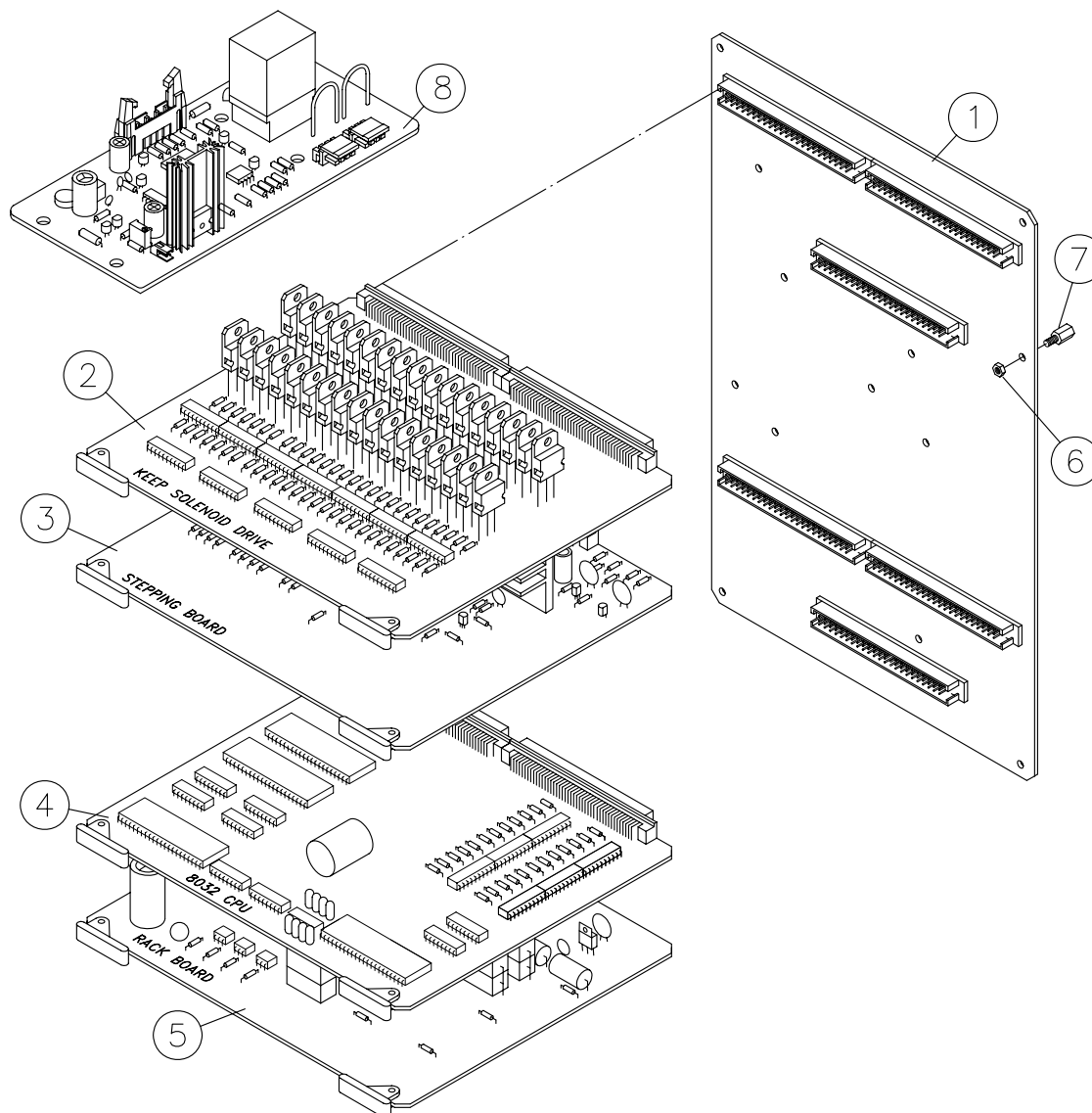
控制單元 /Controller:

T1-T7

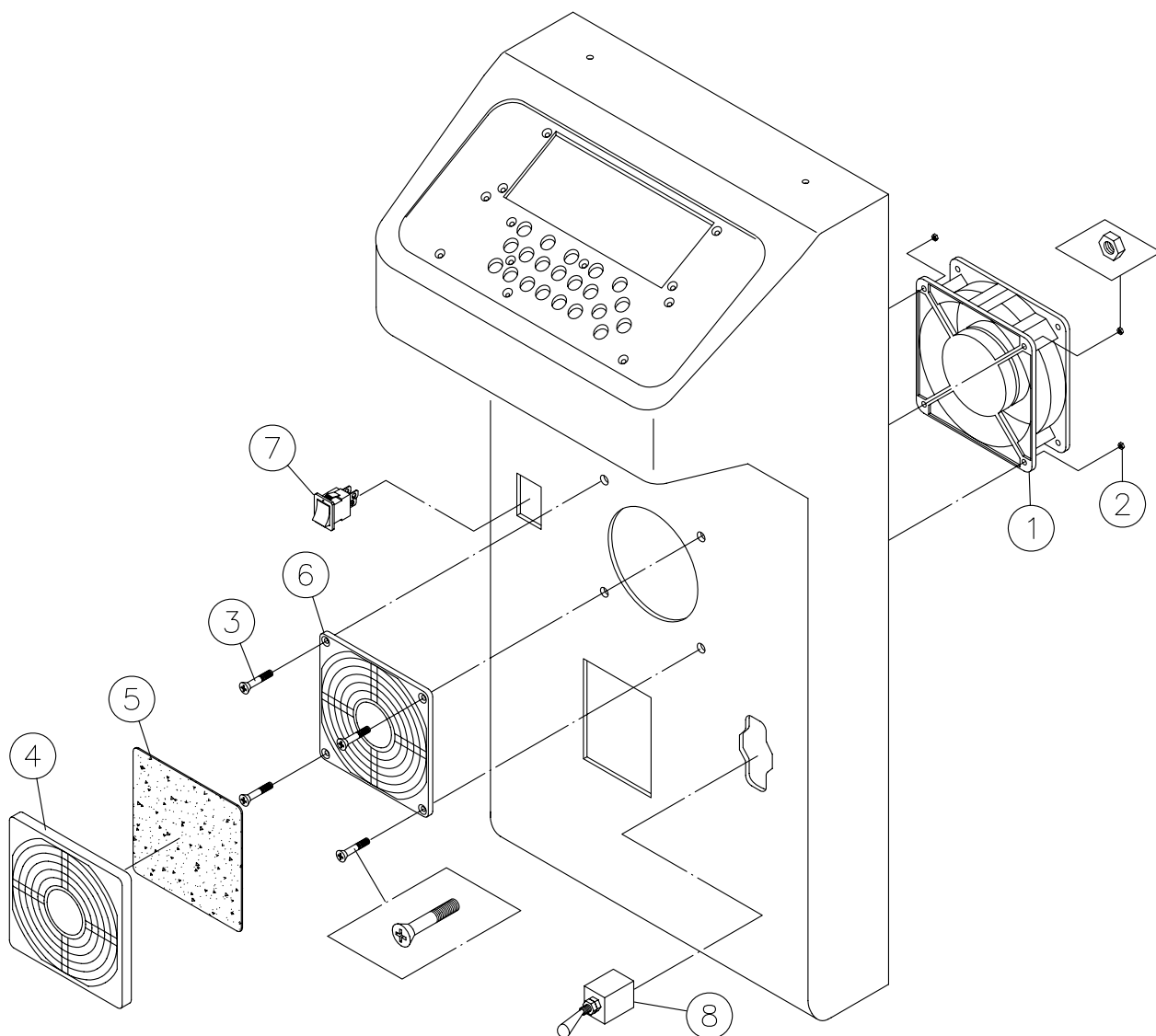
313Series

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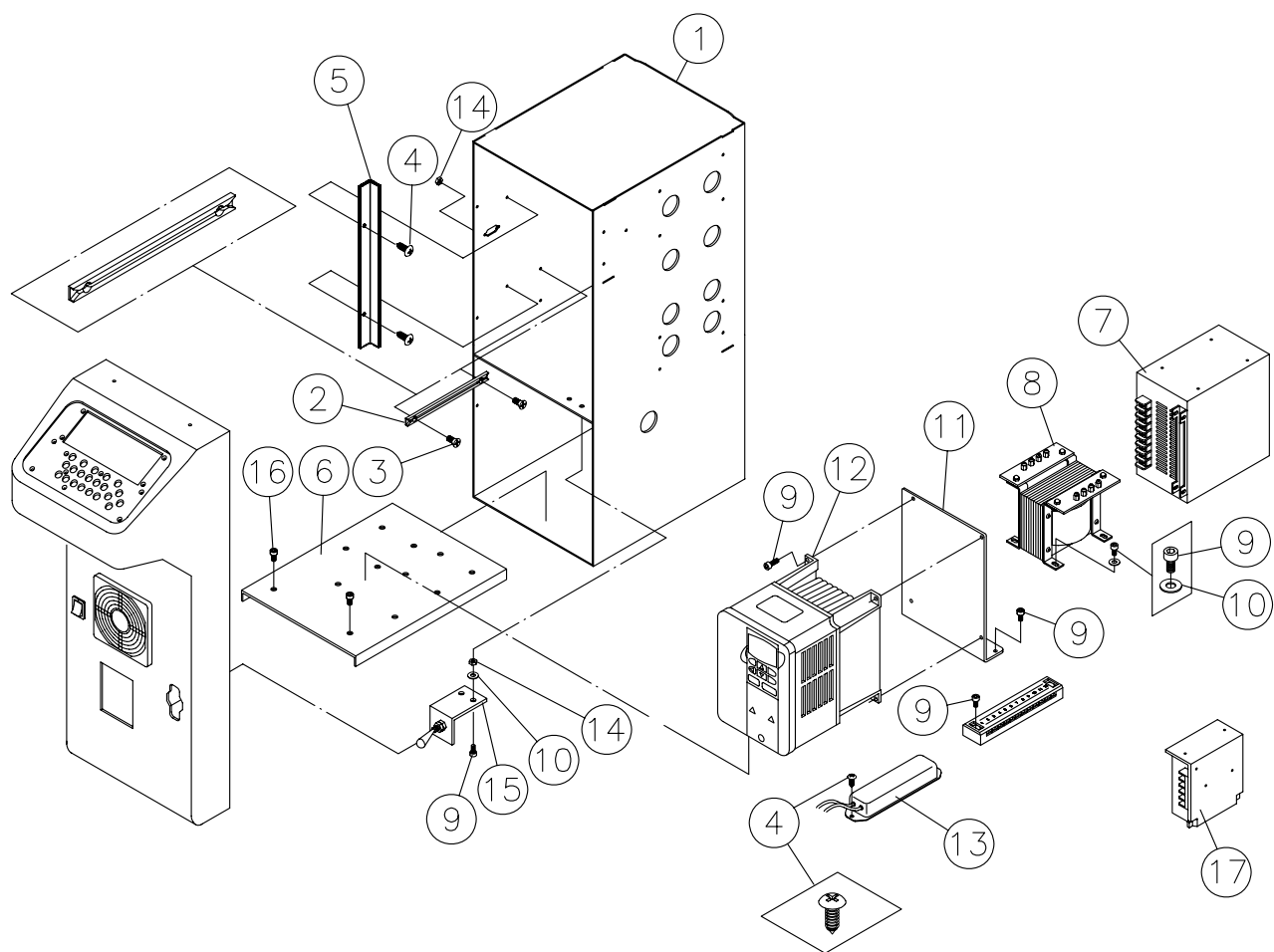
313Series

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313Series

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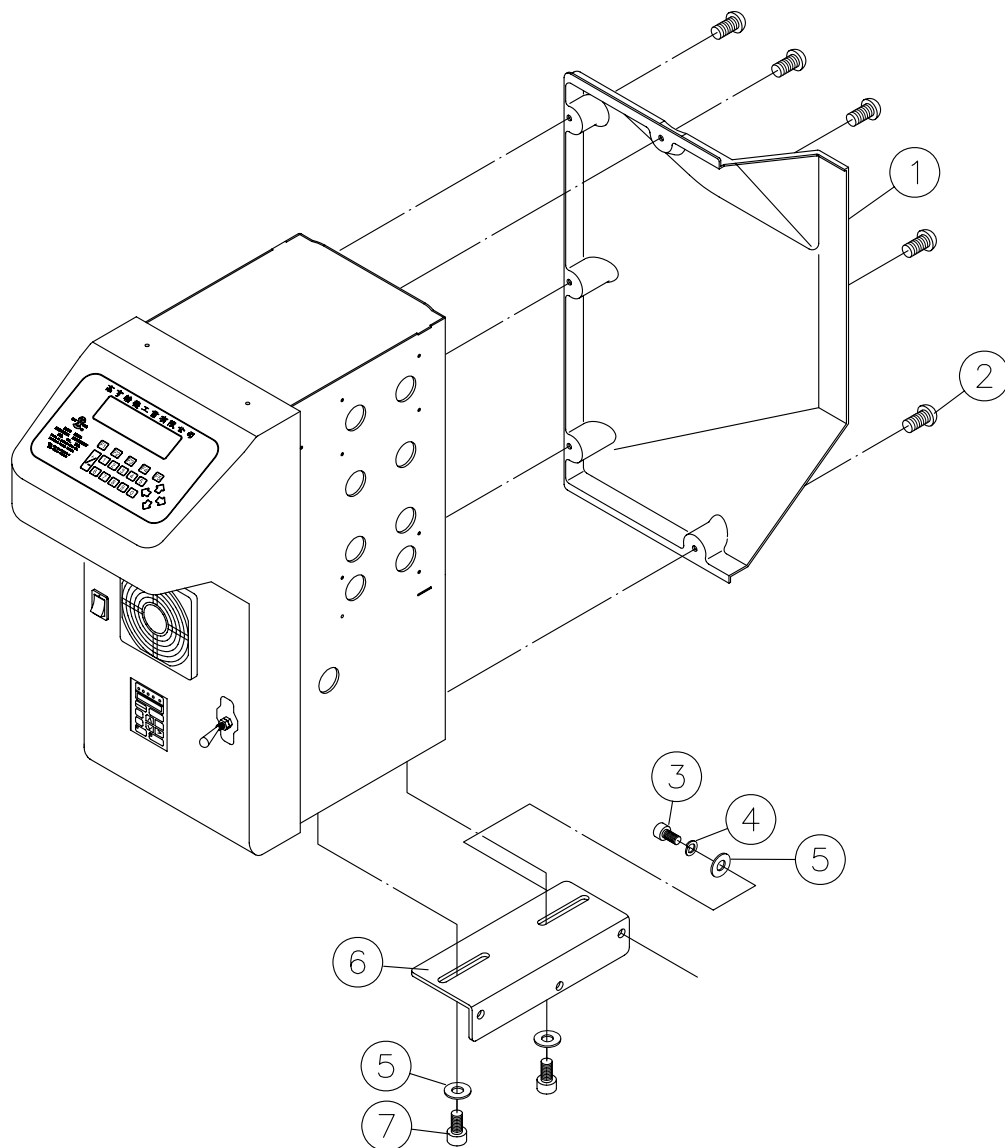
313Series



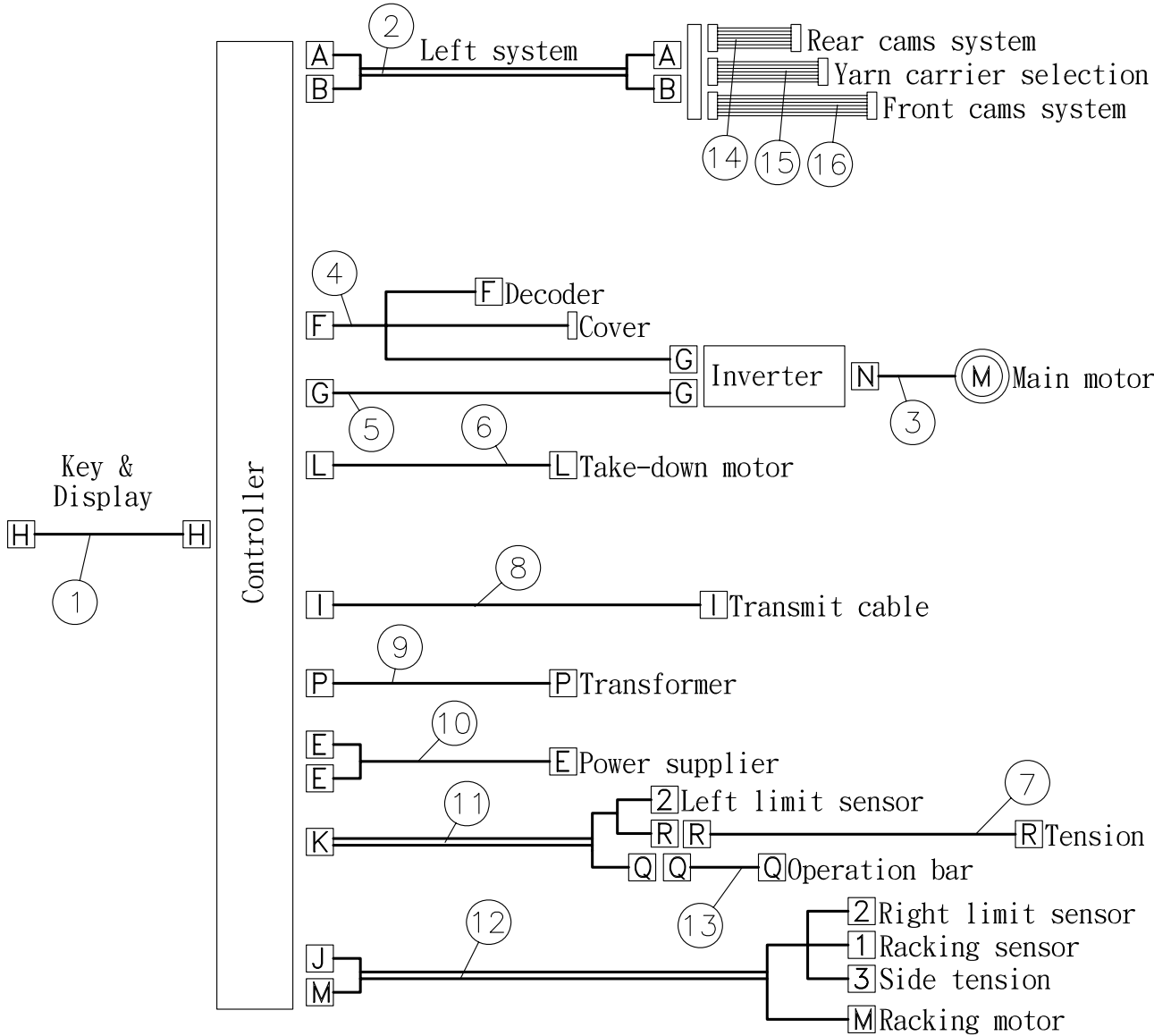
編號 No.	PARTS No.	品名 PARTS NAME	數量 QTY	備註 REMARKS
1	KCK9607	FITTING COVER	1	
2	KCF9631	PCB GUID	8	
3	KSV0305	SCREW <M3x5>	16	
4	KSU0412	SCREW <M4x12>	4	
5	KCK9608	FITTING PLATE	2	
6	KCK9605	FITTING PLATE	1	
7	KCF9632	POWER SUPPLYIER	1	
8	KCF9633	TRANSFORMER	1	
9	KSC0408	SCREW <M4x8>	14	
10	KSW0004	WASHER	6	
11	KCK9604	FITTING PLATE	1	
12	KCF9634	INVERTER	1	
13	KCF9635	RESISTOR	1	
14	KSN0004	NUT	16	
15	KCK9606	FITTING PLATE	1	
16	KSC0616	SCREW <M6x16>	2	
17	KCG9713	5V. POWER SUPPLIER	1	313TJ

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313Series

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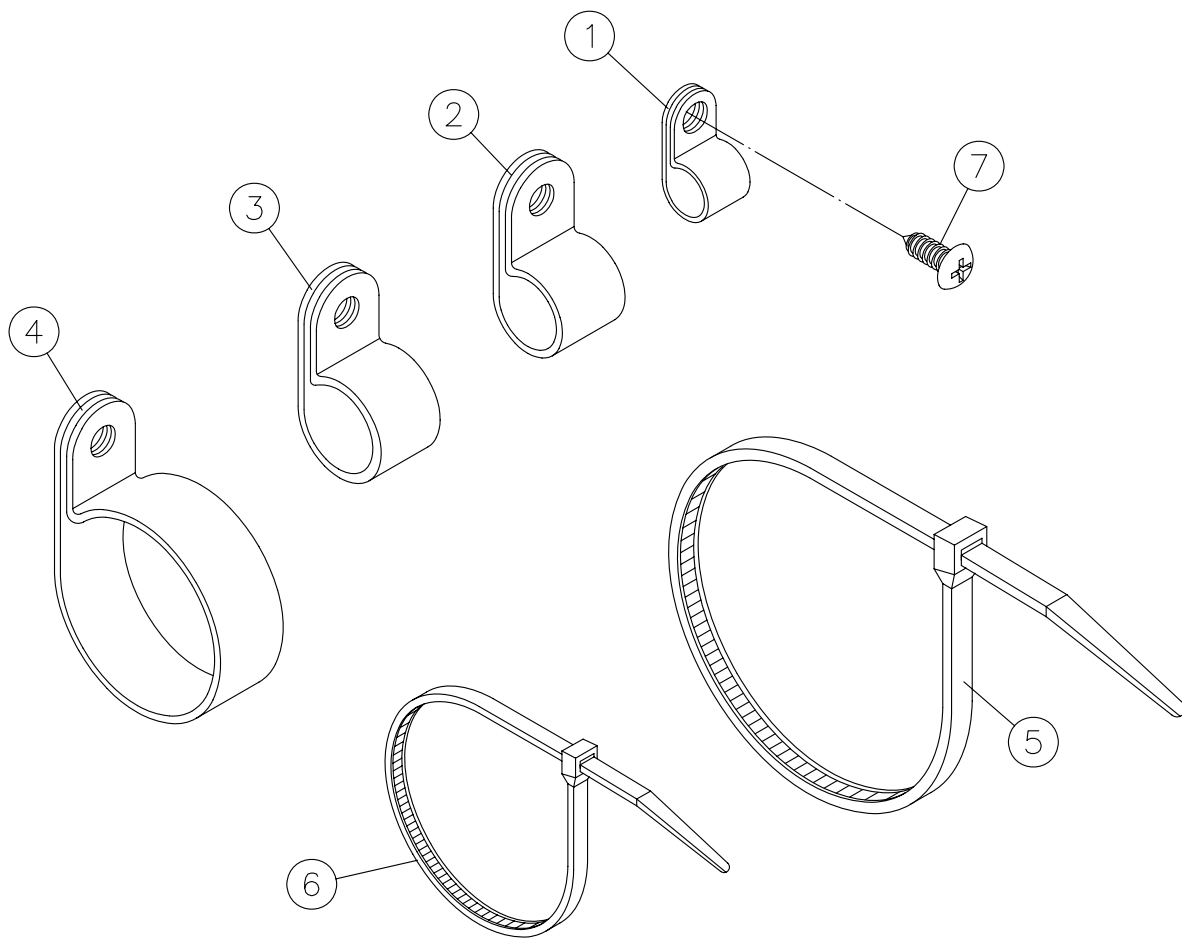
313Series



編號 No.	品名 PARTS NAME	數量 QTY	備註 REMARKS
1 KCF9661	CABLE	1	
2 KCF9662	CABLE	1	
3 KCF9674	CABLE	1	
4 KCF9664	CABLE	1	
5 KCF9665	CABLE	1	
6 KCF9666	CABLE	1	
7 KCF9667	CABLE	1	
8 KCF9668	CABLE	1	
9 KCF9669	CABLE	1	
10 KCF9670	CABLE	1	
11 KCF9671	CABLE	1	
12 KCF9672	CABLE	1	
13 KCF9673	CABLE	1	
14 KCF9675	CABLE	2	
15 KCF9676	CABLE	2	
16 KCF9677	CABLE	2	

T

313Series

[illegible]

KAUOHENG



KH-313 SERIES SERVICE MANUAL

電腦橫編織機

KH

COMPUTERIZED FLAT KNITTING MACHINE

1. LCD

- 1) LCD IS SHOWN NOTHING, BUT CAMS CAN STILL WORK.
- 2) LCD IS SHOWN NOTHING, AND CAMS CAN NOT WORK.

【PART NO.】

1) LCD IS SHOWN NOTHING, BUT CAMS CAN STILL WORK.

Check steps and solution :

1. Make sure H cable (mother board – keyboard) is connected well.
2. Make sure key board – LCD is connected well.
3. Change CPU board or LCD or H cable.

2) LCD IS SHOWN NOTHING, AND CAMS CAN NOT WORK.

Check steps and solution :

1. Make sure AC power input – output is correct.
2. Make sure 3 fuse (5A) inside controller are not burnt-out.
3. Make sure A.V.R is in a good condition.
4. Make sure fuse (5A) in A.V.R is not burnt-out.

NO burnt-out : Change CPU board or rack board.

Burnt-out : Turn off fluorescent lamp, change new fuse and turn on the power again,

4.1 LCD is shown normally : Change ballast of fluorescent lamp. (Please check in turn if there are more than 2 fluorescent lamps.

4.2 LCD is still shown nothing : Change new fuse again ; then change transformer or power supplier.

LCD **【PART NO.】**

1.LCD : KCF9612	2.MOTHER BOARD : KCF9621
3.H CABLE : KCF9661	4.KEYBOARD : KCF9613
5.A.V.R : KCF9714	6.CPU BOARD : KCF9626
7.RACK BOARD : KCF9628	8.TRANSFORMER : KCF9633
9.POWER SUPPLIER : KCF9632	

2. LEFT LIMIT SENSOR

- 1) "LEFT" IS SHOWN ON THE SCREEN,
BUT LEFT LIMIT SENSOR IS ON.
- 2) "LEFT" IS SHOWN ON THE SCREEN,
AND LEFT LIMIT SENSOR IS OFF.

【PART NO.】

- 1) "LEFT" IS SHOWN ON THE SCREEN, BUT LEFT LIMIT SENSOR IS ON.

Check steps and solution :

1. Make sure F cable - sensor is connected well.
2. Change sensor or CPU board or mother board.

2) "LEFT" IS SHOWN ON THE SCREEN, AND LEFT LIMIT SENSOR IS OFF.

Check steps and solution :

Make sure mother board inside the controller is without short condition.

1. **Yellow light is "ON"** : Make sure the green light is "ON"

"ON" : 1.1 Make sure F cable - sensor is connected well.

1.2 Change sensor or CPU board or mother board.

"OFF" : Change power supplier.

2. **Yellow light is "OFF"** :

2.1 Change CPU board or mother board.

3. **Yellow light is "TWINKLE"** : It means 24V short.

Testing steps as followings :

3.1 Turn off the power, pull off AB cable from carriage and turn on the power again.

Yellow light is "ON" - normal : Carriage is 24V short. Check it.

Yellow light is "OFF" - abnormal : Carriage is no problem.

3.2 Carriages are problem :

3.2.1 Turn off the power, plug AB cable into carriage and pull off front cables (KCF9677) of carriage to test.

Yellow light is "ON" - normal :

Carriage is 24V short. Check solenoid and PC board (KCE0002).

Yellow light is "TWINKLE" :

Carriage is no problem.

3.2.2 Turn off the power, plug AB cable into carriage and pull off rear cables (KCF9675) of carriage to test.

Yellow light is "ON" - normal :

Carriages is 24V short. Check solenoid and PC board (KCE0002).

Yellow light is "TWINKLE" :

Carriages is no problem.

3.2.3 Turn off the power, pull off cable (KCF9676) and turn on the power.

Yellow light is "ON" - normal :

PC board (KCE0001) is 24V short. Check solenoid and make sure screws on PC board (KCE0001) are not loose.

Yellow light is "TWINKLE" :

PC board (KCE0001) is no problem.

3.4 Carriages are no problem :

Turn off the power, pull off cable (KCE9667) and sensor (KCE9034 & KCE9407) in turn to find which part has problem.

LEFT LIMIT SENSOR **【PART NO.】**

1.SENSOR : KCF9034	2.MOTHER BOARD : KCF9621
3.F CABLE : KCF9664	4.CPU BOARD : KCF9626
5.TOP TENSION : KCF90031N	6.CABLE : KCF9667
7.AB CABLE : KCF9662	8.SENSOR OF RACKING : KCF9407
11.SOLENOID : KCE2501	12.CABLE : KCF9677
13.CABLE : KCF9675	14.CABLE : KCF9676
15.PC BOARD : KCE0002	16.PC BOARD : KCE0001
17.POWER SUPPLIER : KCF9632	

3. RACK

- 1) "RACK" IS SHOWN ON THE SCREEN BEFORE RUNNING.
- 2) "RACK" IS SHOWN ON THE SCREEN WHEN RUNNING.
- 3) TAKE-DOWN TURNS AUTOMATICALLY OR RACKING RUNS AUTOMATICALLY WHEN TURNING ON THE POWER.

【PART NO.】

1) "RACK" IS SHOWN ON THE SCREEN BEFORE RUNNING.

Check steps and solution :

1. Make sure sensor of racking is in correct position.
2. Make sure sensor of racking is "ON".

"OFF" : Change sensor of racking.

"ON" : Change CPU board. Change sensor of racking again if problem is still occurred.

2) "RACK IS SHOWN ON THE SCREEN WHEN RUNNING.

Check steps and solution :

1. Put top tension in out-of-order condition to make sure signal lamp will be "ON".

"ON" : It is no problem and make sure sensor of racking is in correct position.

"OFF" : It means 24V short. Check steps are the same with "LEFT" is shown on the screen.

3) TAKE-DOWN TURNS AUTOMATICALLY OR RACKING
RUNS AUTOMATICALLY WHEN TURNING ON THE
POWER.

Check steps and solution :

1. Change rack board.
2. Change CPU board if problem is still occurred.

RACK 【PART NO.】

1.SENSOR OF RACKING : KCF9407	2.TOP TENSION : KCF90031N
3.RACK BOARD : KCF9628	4.CPU BOARD : KCF9626

4. YARN CARRIER SOLENOIDS & CAMS

【PART NO.】

YARN CARRIER SOLENOIDS & CAMS

Check steps and solution :

Enter into "5. TEST"

1.EDIT	2.RUN
3.FILE	4.FUNC
5.TEST	

Select "4. CAM" to test if cams work with any problem

1.RACK	2.MOTOR
3.SENSO	4.CAM
5.TK-DN	6.STITC

1. Test solenoids without any problem and check if cams move properly?
2. Test is no problem but sometimes is problem when running. Please change solenoids. If problem is still occurred, change A cable.
3. There is problem and one of solenoids can not work :
 - 3.1 Make sure solenoids get problem and change new ones.
 - 3.2 Exchange solenoid boards with another machine, if the problem is occurred on another machine, change a new solenoid board.
 - 3.3 Change A cable or PC board (KCF9204) or cable (KCF9675-77) or PC board (KCE0001) or PC board (KCE0002) or mother board.

Remark : For TJ machine, it should be exchanged with PC board (KCG0001) to test : then check if cable is connected well or not.

YARN CARRIER SOLENOIDS & CAMS

【PART NO.】

1.SOLENOID : KCE2501	2.AB CABLE : KCF9662
3.SOLENOID BOARD : KCF9622	4.MOTHER BOARD : KCF9621
5.PC BOARD : KCG0001	6.CABLE : KCF9677
7.CABLE : KCF9675	8.CABLE : KCF9676
9.PC BOARD : KCF9204	10.PC BOARD : KCE0001
11.PC BOARD : KCE0002	

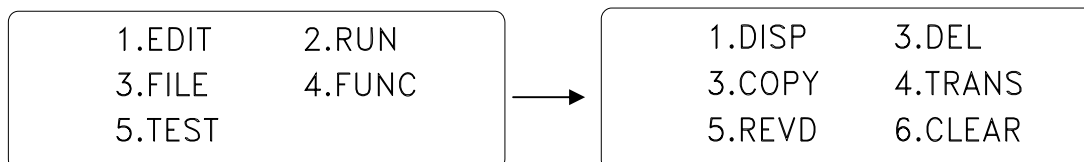
5. MEMORY FULL

【PART NO.】

MEMORY FULL

Check steps and solution :

1. Enter into 3. FILE



2. Select 6. CLEAR : Clear all files

DO YOU CLR:				
SURE				EXIT

DELETE ALL FILE !				
SURE				EXIT

DELETE ALL FILE : <u>555</u>				
SURE				EXIT

Enter code NO : 555

3. Memory full : Check if parameter was lost or not. If inside parameter was lost, it is properly because of low battery of CPU board. Please change a new battery. Also change CPU board if problem is still occurred.

MEMORY FULL 【PART NO.】

1.CPU BOARD : KCF9626	
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6. STITCH

【PART NO.】

STITCH

Check steps and solution :

1. Enter into 5. TEST

1.EDIT	2.RUN
3.FILE	4.FUNC
5.TEST	

2. Select 6. STITC

1.RACK	2.MOTOR
3.SENSO	4.CAM
5.TK-DN	6.STITC

3. Start to test front & rear

Test is O.K. But stitch is not good.	a. Check stitch control teeth plate or b. Change stepping board
Test is O.K. But "STITC" is shown.	a. Change B cable

3.1 Exchange stepping boards with another machine (NO.2), if the problem is occurred on another machine, change a new stepping board.

3.2 Check stitch control teeth plate is without any problem, if it was damaged , change a new one.

3.3 Exchange with front & rear PC boards (KCE0002), if the problem is occurred from front to rear side, change a new one.

3.4 Exchange with front & rear stepping motors, if the problem is occurred from front to rear side, change a new one.

3.5 Change B cable or PC board (KCF9204) or cable (KCF9675-77) or mother board.

STITCH **【PART NO.】**

1.STITCH CONTROL TEETH PLATE : KCF9145	2.STEPPING BOARD : KCF9623
3.AB CABLE : KCF9662	4.STEPPING MOTOR : KCM2004A
5.PC BOARD : KCE0002	6.PC BOARD : KCF9204
7.CABLE : KCF9675-9677	8.MOTHER BOARD : KCF9621

7. OTHERS

- 1) IT CAN NOT START WITH OPERATION BAR WHEN ENTERING RUN MODE / 【PART NO.】
- 2) FILE IS MISSING, PROGRAM AND PARAMETERS ARE IN DISORDER WHEN ENTERING RUN MODE / 【PART NO.】
- 3) TAKE-DOWN MOTOR CAN NOT WORK / 【PART NO.】
- 4) TAKE-DOWN DOESN'T TURN STABLY / 【PART NO.】
- 5) CARRIAGE WON'T TURN BACK WHEN RUNNING / 【PART NO.】
- 6) SIGNAL LAMP IS OUT OF ORDER / 【PART NO.】
- 7) IT CAN NOT GET RID OF ERROR WHEN ENTERING RUN MODE / 【PART NO.】
- 8) STITCH CAMS CAN NOT WORK / 【PART NO.】

1) IT CAN NOT START WITH OPERATION BAR WHEN ENTERING RUN MODE.

Check steps and solution :

1. Make sure PC board (KCF9372) – K cable – mother board is connected well.
2. Change PC board (KCF9372) or CPU board or mother board.

【PART NO.】

1.PC BOARD : KCF9372	2.K CABLE : KCF9671
3.MOTHER BOARD : KCF9621	4.CPU BOARD : KCF9626

2) FILE IS MISSING, PROGRAM AND PARAMETERS ARE IN DISORDER WHEN ENTERING RUN MODE.

Check steps and solution :

1. Low battery of CPU board, so please change a new battery.
2. Change CPU board if problem can not be solved.

【PART NO.】

1.CPU BOARD : KCF9626	
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3) TAKE-DOWN MOTOR CAN NOT WORK.

Check steps and solution :

1. Make sure L cable – take-down motor is connected well.
2. Make sure take-down gear run smoothly without any problem.
3. Change CPU board or rack board or turning knob assy. or take-down motor.

【PART NO.】

1.TURNING KNOB ASSY. : KCF9532	2.TAKE-DOWN GEAR : KCF9526A
3.TAKE-DOWN MOTOR : KCF9526	4.L CABLE : KCF9666
5.CPU BOARD : KCF9626	

4) TAKE-DOWN DOESN'T TURN STABLY.

Check steps and solution :

1. Make sure take-down was not obstructed.
2. Change turning knob assy. or take-down gear or take-down motor.

【PART NO.】

1.TURNING KNOB ASSY. : KCF9532	2.TAKE-DOWN GEAR : KCF9526A
3.TAKE-DOWN MOTOR : KCF9526	

5) CARRIAGE WON'T TURN BACK WHEN RUNNING.

Check steps and solution :

1. Check mother board – K cable & F cable & J cable are connected well.
2. Change sensor NO.2 & NO.3 and right limit sensor.
3. If problem is still occurred, please change CPU board or inverter or mother board in turn.

【PART NO.】

1.MOTHER BOARD : KCF9621	2.K CABLE : KCF9671
3.F CABLE : KCF9664	4.J CABLE : KCF9672
5.SENSOR : KCF9034	6.CPU BOARD : KCF9626
7.INVERTER : KCF9634	

6) SIGNAL LAMP IS OUT OF ORDER.

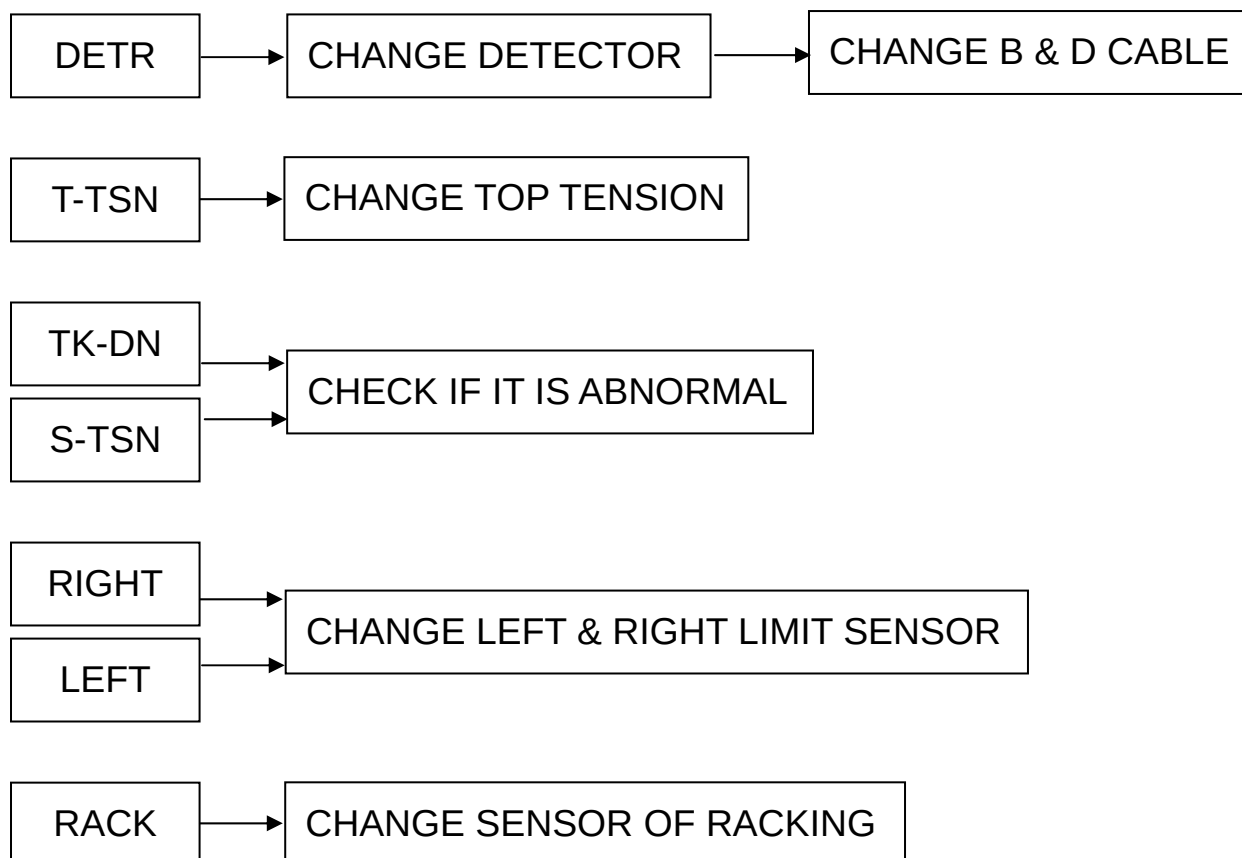
Check steps and solution :

1. Check cable of signal lamp is no problem.
2. Change signal lamp.
3. Change mother board or inverter.

【PART NO.】

1.SIGNAL LAMP(G) : KCF9001G	2.SIGNAL LAMP(Y) : KCF9001Y
3.MOTHER BAORD : KCF9621	4.INVERTER : KCF9634

7) IT CAN NOT GET RID OF ERROR WHEN ENTERING RUN MODE.



☆If it still can not get rid of error, please change CPU board.

【PART NO.】

1.TURNING KNOB ASSY. : KCF9532	2.TAKE-DOWN GEAR : KCF9526A
3.TAKE-DOWN MOTOR : KCF9526	4.L CABLE : KCF9666
5.CPU BOARD : KCF9626	

8) STITCH CAMS CAN NOT WORK.

Check steps and solution :

1. Carriage can not work :

Check steps are the same with “LEFT” is shown on the screen.

2. Check green light on power supplier is “OFF” ; then change one new power supplier.

【PART NO.】

1.POWER SUPPLIER : KCF9632	
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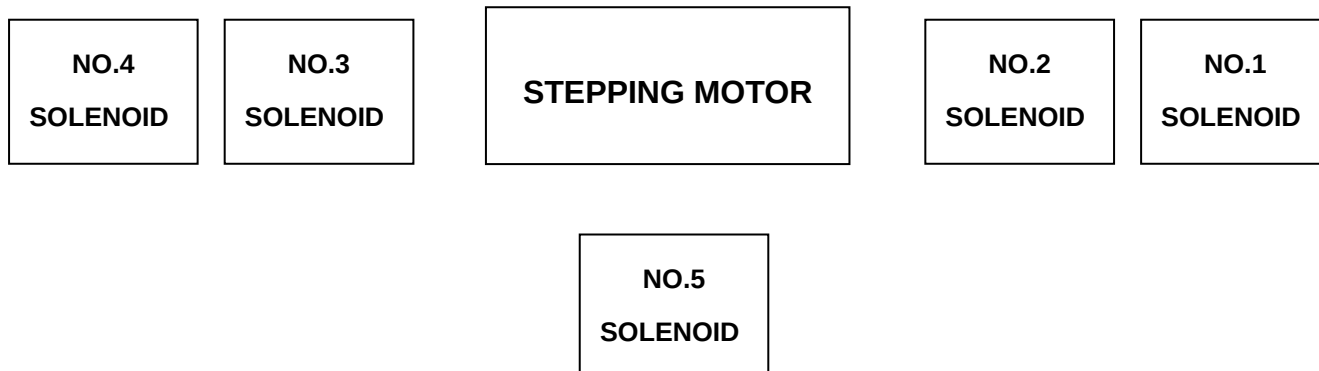
CABLE CONTROL

A CABLE	1. FRONT CAM :	
	313	4 x SOLENOIDS
	313J	5 x SOLENOIDS
	313TJ	6 x SOLENOIDS, PC BOARD (KCG0001)
	2. REAR CAM :	
	313	4 x SOLENOIDS
	313J	5 x SOLENOIDS
	313TJ	6 x SOLENOIDS, PC BOARD (KCG0001)
	3. PC BOARD : 6 x SOLENOIDS	
B CABLE	1. FRONT STITCH (STITCH MOTOR & PC BOARD-KCE0002) 2. REAR STITCH (STITCH MOTOR & PC BOARD-KCE0002) 3. FRONT DETECTOR 4. REAR DETECTOR	
E CABLE	24V POWER DC	
F CABLE	INVERTER 、 SENSOR NO.1 & NO.3	
H CABLE	LCD 、 KEYBOARD 、 BUZZER CONTROL WIRE	
I CABLE	TRANSMISSION CONTROL WIRE	
J CABLE	RACKING SIGNAL 、 RIGHT SIDE TENSION 、 RIGHT SENSOR CABLE	
K CABLE	OPERATION BAR 、 LEFT SIDE TENSION 、 TOP TENSION CONTROL WIRE 、 SENSOR NO.2	
L CABLE	TAKE-DOWN POWER CONTROL WIRE	
M CABLE	RACKING POWER CONTROL WIRE	

CHANGE SOLENOIDS

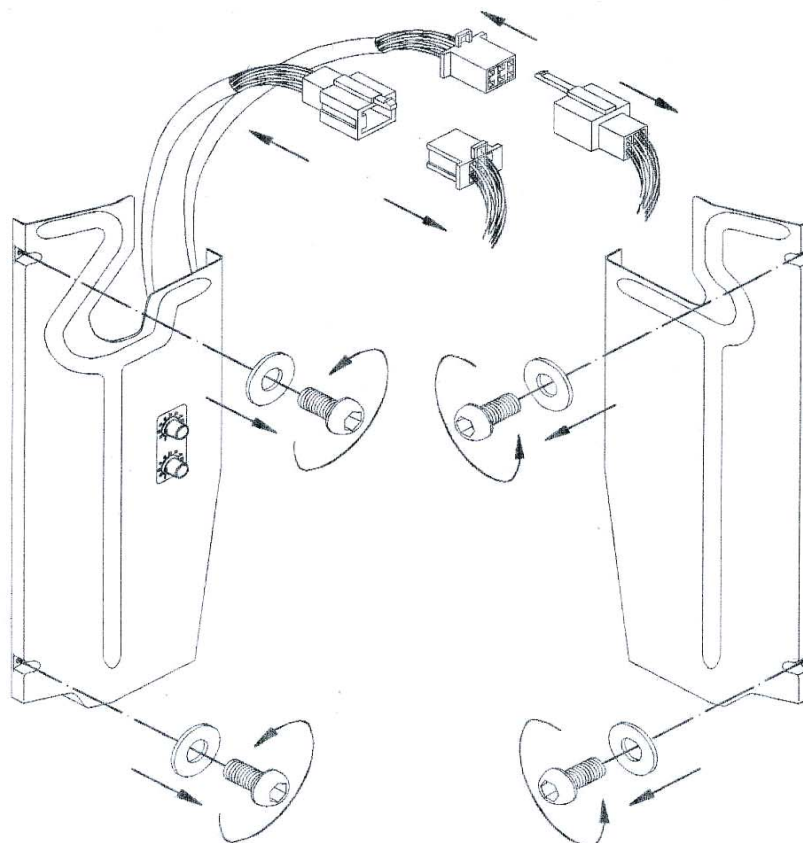
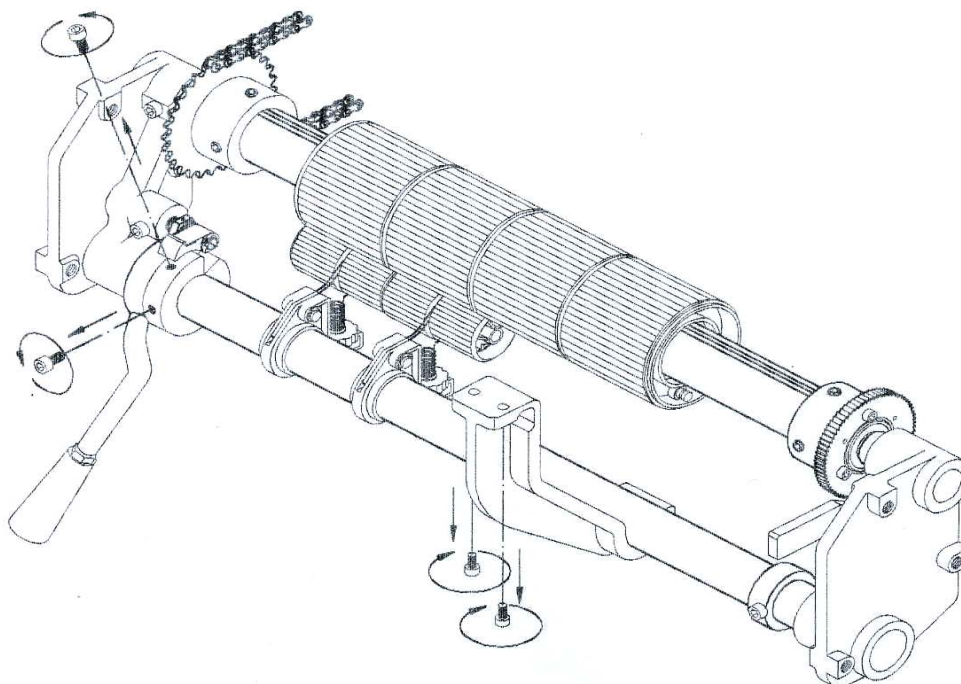
A.	PROGRAM IS " <u>KNIT</u> " BUT ACTION IS " <u>TUCK</u> "	CHANGE SOLENOID NO.3
B.	PROGRAM IS " <u>ALL KNIT</u> " BUT ACTION IS " <u>HIGH BUTT KNIT, LOW BUTT TUCK</u> "	CHANGE SOLENOID NO.3 & 4
C.	PROGRAM IS " <u>ALL KNIT</u> " BUT ACTION IS " <u>HIGH BUTT KNIT</u> "	CHANGE SOLENOID NO.1 & 2
D.	PROGRAM IS " <u>KNIT</u> " BUT ACTION IS " <u>MISS</u> "	CHANGE SOLENOID NO.2
E.	PROGRAM IS " <u>MISS</u> " BUT ACTION IS " <u>TUCK</u> "	CHANGE SOLENOID NO.2 & 5

☆ Please pay attention to the height of cam action after changing solenoids.



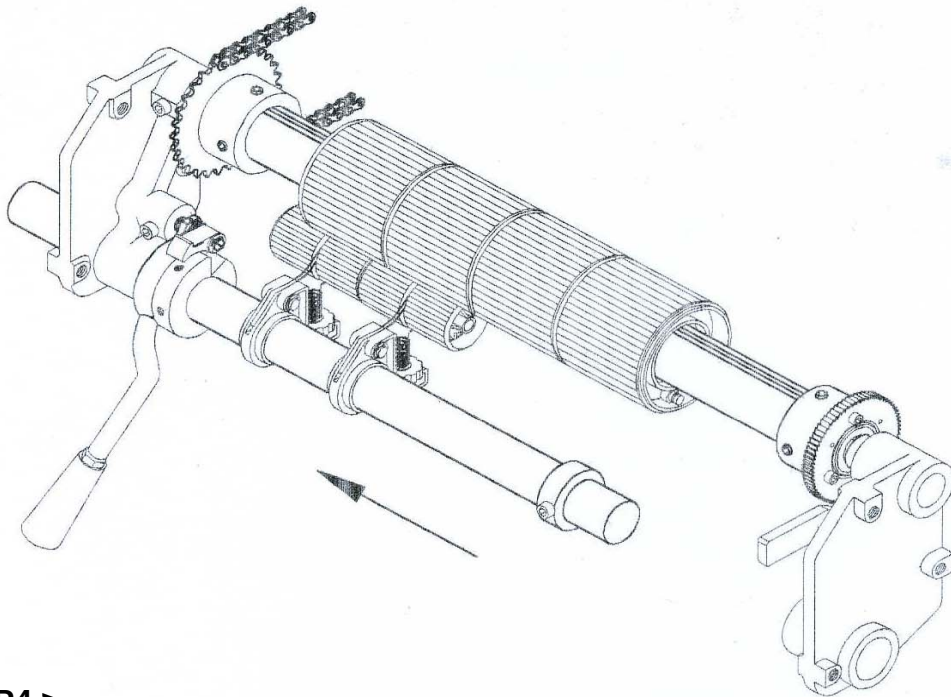
PC BOARD CONTROL

NO.1	LEFT SYSTEM – CAM ACTION
NO.2	LEFT SYSTEM – STITCH ACTION
NO.3	CPU BOARD
NO.4	RACK BOARD (RACKING 、 TAKE-DOWN 、 TOP TENSION 、 CPU POWER)
MOTHER BOARD	24V POWER 、 SIGNAL LAMP 、 LCD

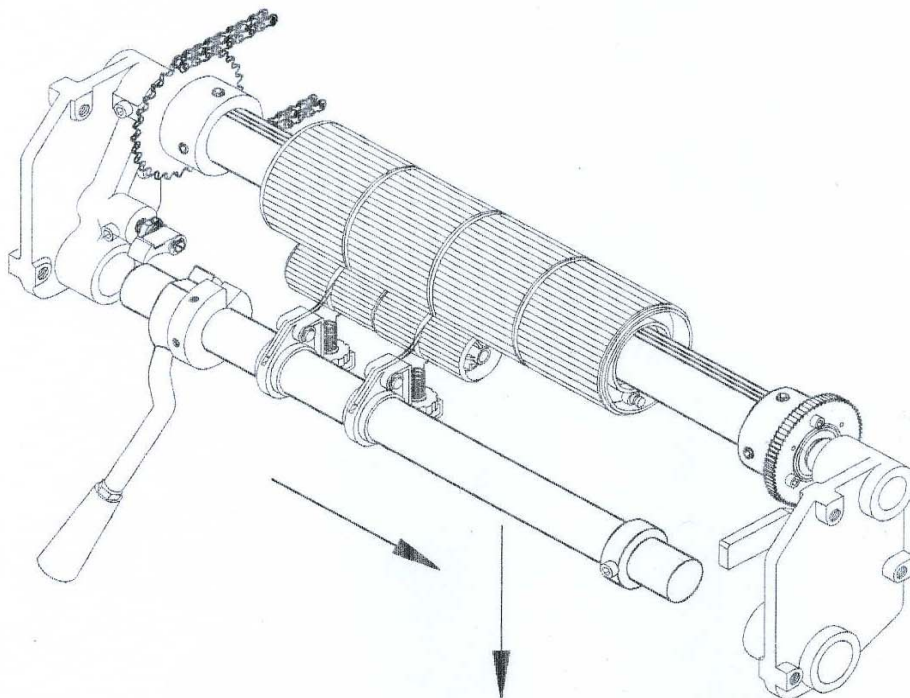
DISASSEMBLE MAIN ROLLER (OLD)**KH-313 SERIES THE STEPS OF DISASSEMBLE MAIN ROLLER****< STEP1 >****< STEP2 >**

KH-313 SERIES THE STEPS OF DISASSEMBLE MAIN ROLLER

< STEP3 >

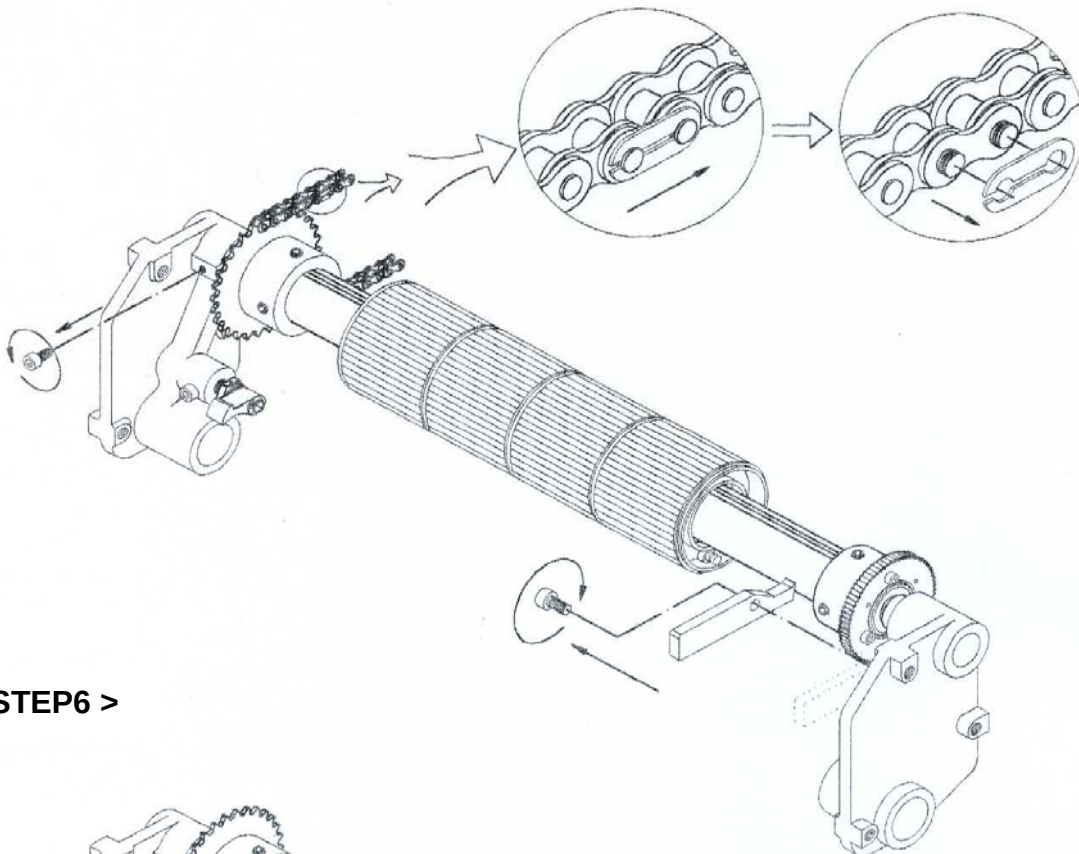


< STEP4 >

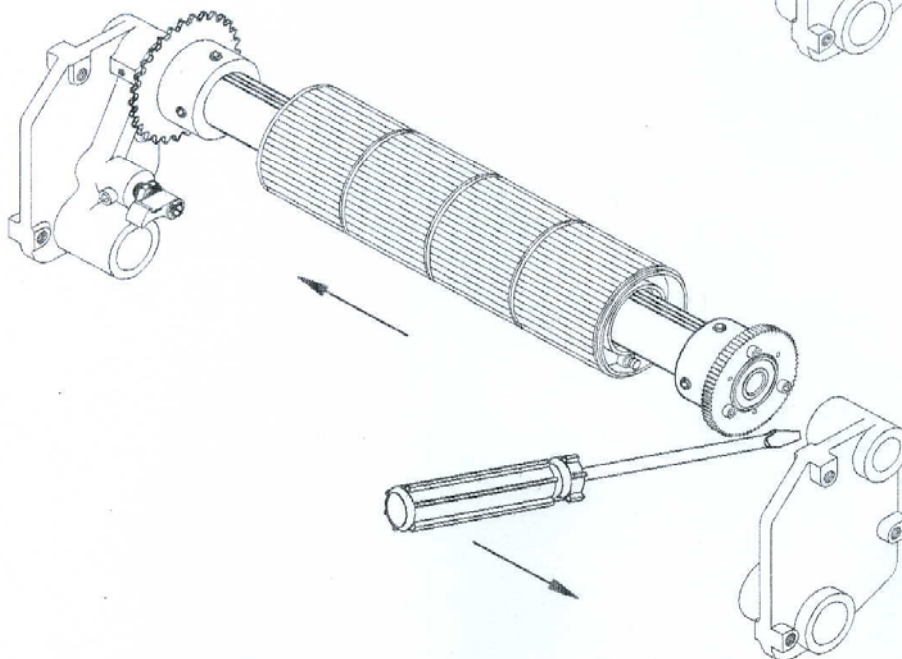


KH-313 SERIES THE STEPS OF DISASSEMBLE MAIN ROLLER

< STEP5 >

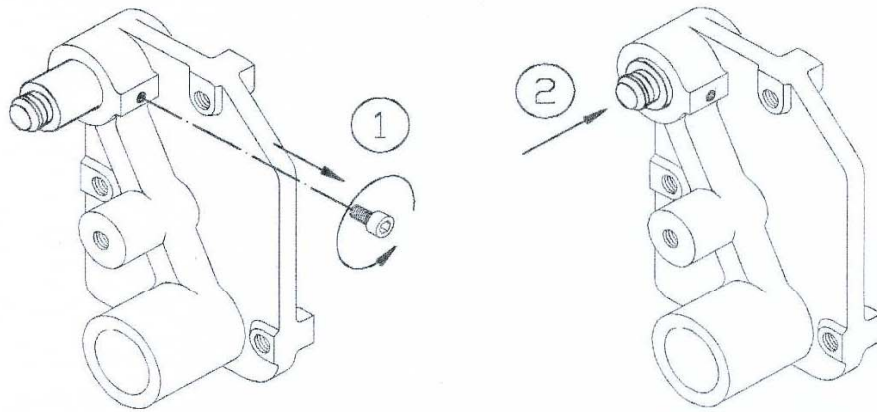


< STEP6 >

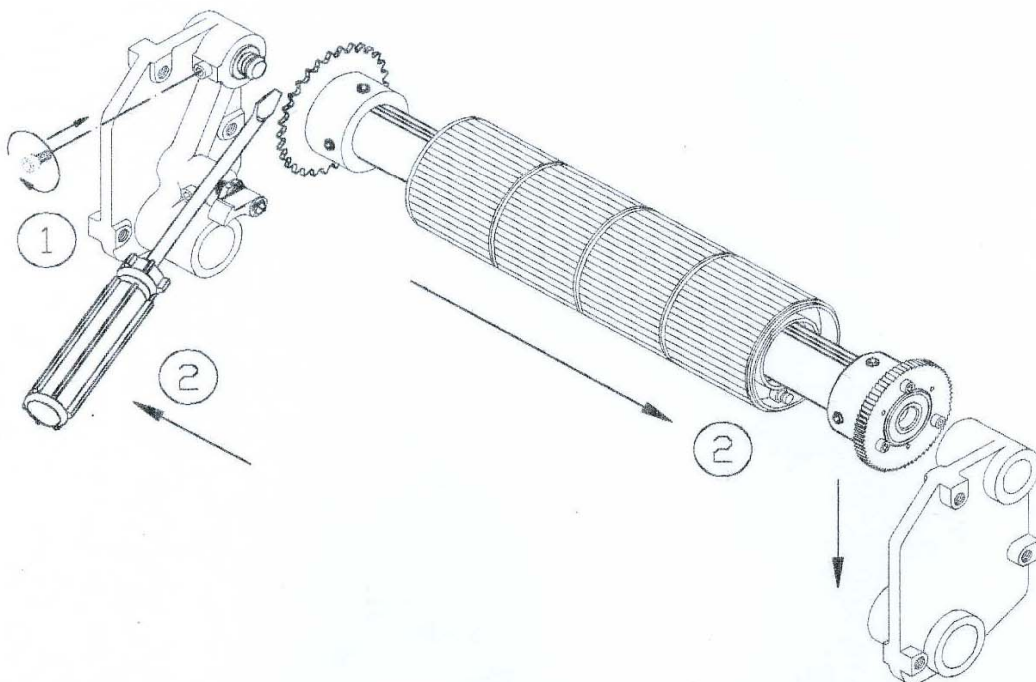


KH-313 SERIES THE STEPS OF DISASSEMBLE MAIN ROLLER

< STEP7 >



< STEP8 >



DELTA INVERTER PARAMETER

1) KH-313 & 313J & 313TJ

KH-313 & 313J & 313TJ

CONSTANT NO.	INITIAL SETING
00-02	10 : Refresh mode
00-07	01 : Security mode
00-08	01 : New parameter mode
01-00	180
01-09	1.2
01-10	0.3
02-00	01
02-01	02
02-03	10
04-00	1.20
04-01	01
04-19	0.03
07-01	16
07-02	3.0
07-04	06
07-06	19428
08-00	50
08-02	0.3

Remark : 1. Inverter display shows <12.10> after setting up parameters.
 2. If more or less than <12.10>, it needs to adjust one variable resistance VR. Turning clockwise is to increase and counterclockwise to decrease.